SUPPLEMENT TO OFFICIAL STATEMENT DATED OCTOBER 25, 2022

\$630,195,000 Department of Transportation of Maryland Consolidated Transportation Bonds

\$295,000,000 Consolidated Transportation Bonds Series 2021 A \$139,210,000 Consolidated Transportation Bonds Refunding Series 2021 B

\$52,400,000 Consolidated Transportation Bonds Refunding Series 2022 A (Forward Delivery) \$143,585,000 Consolidated Transportation Bonds Refunding Series 2022 B (Forward Delivery)

This Supplement to Official Statement dated October 25, 2022 (this "Supplement to Official Statement") supplements and amends certain information contained in the Official Statement dated September 30, 2021 (the "Original Official Statement") relating to the above-referenced bonds. All capitalized terms used but not defined herein shall have the meanings set forth in the Original Official Statement.

As described under the caption "FORWARD DELIVERY BOND CONSIDERATIONS" in the Original Official Statement, \$143,585,000 Consolidated Transportation Bonds Refunding Series 2022 B (Forward Delivery) (the "2022 B Bonds") were sold to the Underwriters pursuant to a Forward Delivery Bond Purchase Agreement dated September 30, 2021. The Department agreed in the Forward Delivery Bond Purchase Agreement to deliver an Updated Official Statement (as defined herein) not more than three weeks and not less than five days prior to the settlement date of the 2022 B Bonds on November 3, 2022, which Updated Official Statement would contain any material updates or changes to the information contained in the Original Official Statement. The Original Official Statement, as amended and supplemented by this Supplement to Official Statement, constitutes the "Updated Official Statement" for the 2022 B Bonds. This Supplement to Official Statement amends and restates as of the date hereof the information contained in the Supplement to Official Statement dated February 25, 2022 which was delivered in connection with the settlement of the 2022 A Bonds on March 3, 2022.

The Original Official Statement is amended and supplemented by this Supplement to Official Statement as follows.

The banner paragraph on the cover page of the Original Official Statement is hereby updated and restated as follows:

In the opinion of Bond Counsel, assuming the accuracy of certain representations and the continuing compliance with certain covenants, under existing laws, regulations, rulings and judicial decisions, interest on the Bonds is excludable from gross income for federal income tax purposes and is not a specific preference item for purposes of the federal alternative minimum tax imposed on individuals. For tax years beginning after December 31, 2022, interest on the Bonds may affect the federal alternative minimum tax imposed on certain corporations. In the opinion of Bond Counsel, under the Act, the Bonds, their transfer, the interest payable on them, and any income derived from them, including any profit realized in their sale or exchange, shall be exempt at all times from every kind and nature of taxation by the State of Maryland or by any of its political subdivisions, municipal corporations, or public agencies of any kind, except that no opinion is expressed as to such exemption from estate or inheritance taxes, or any other taxes not levied directly on the principal of and interest on the Bonds, their transfer and income, including any profit made on sale. See "TAX MATTERS" herein. Deliveries of the opinion of Bond Counsel with respect to the 2022 A Bonds and the 2022 B Bonds are subject to the satisfaction of certain terms and conditions provided in the Forward Delivery Bond Purchase Contracts. See "FORWARD DELIVERY BOND CONSIDERATIONS" herein.

James F. Ports, Jr. became Secretary of the Department effective January 11, 2022, succeeding former Secretary Gregory I. Slater.

Holly Arnold became Acting Administrator of the Maryland Transit Administration effective June 7, 2021 and was subsequently permanently appointed to the position on November 8, 2021. She succeeded former Administrator Kevin B. Quinn, Jr.

The "IMPACT OF COVID-19 ON THE FINANCIAL CONDITION AND OPERATIONS OF THE **DEPARTMENT**" section of the Original Official Statement is hereby updated and restated in its entirety by the following:

Impact of COVID-19 on the Financial Condition and Operations of the Department

The outbreak of COVID-19 was declared a pandemic by the World Health Organization and a national emergency by the President of the United States on March 13, 2020, and impacted travel, commerce, and financial markets globally. In Maryland, Governor Larry Hogan declared a state of emergency and enacted various Executive Orders addressing the pandemic from March 5, 2020 through June 15, 2021. The extension of certain administrative deadlines, including deadlines related to vehicle registrations and driver's licenses, extended until August 15, 2021.

During the course of the pandemic, the President of the United States signed into law various federal relief bills, which included funding that benefited the Department. The Department received \$508 million from the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"), signed into law on March 27, 2020. These funds were fully expended by the end of fiscal year 2021. The Department received \$253 million from the Coronavirus Response and Relief Supplemental Appropriations Act of 2021, ("CRRSAA") signed into law on December 27, 2020. These funds were fully expended by the end of fiscal year 2021. The Department received \$936 million from the American Rescue Plan Act of 2021 (the "ARPA"), signed into law on March 11, 2021. The Department expects to fully expend these funds by the end of fiscal year 2024.

Throughout the pandemic, the Department continued to deliver critical statewide transportation services and needs that allowed front-line workers to get to their jobs and maintained connections across the supply chain. The diversity of revenues and the flexibility of Maryland's consolidated Transportation Trust Fund was critical to that success to maintain operations until federal relief efforts brought additional funding to offset revenue loss. Although transit ridership and revenues are experiencing a slower recovery,

the Department's operations, usage, and revenues have generally returned to or exceeded pre-pandemic levels.

The "ESTIMATED DEBT SERVICE COVERAGE" paragraph in the "SUMMARY STATEMENT" of the Original Official Statement is hereby updated and restated by the following:

ESTIMATED DEBT SERVICE COVERAGE — Maximum annual principal and interest requirements on the Consolidated Transportation Bonds after issuance of the 2022 B Bonds and the refunding of the 2022 B Refunded Bonds on November 3, 2022 is expected to be \$480,461,159 in fiscal year 2023. Upon issuance of the 2022 B Bonds and the refunding of the 2022 B Refunded Bonds, (i) net receipts (unaudited) for the fiscal year ended June 30, 2022 is expected to be 4.21 times such maximum annual principal and interest requirements on the Consolidated Transportation Bonds, and (ii) proceeds from pledged taxes (unaudited) for the fiscal year ended June 30, 2022, is expected to be 5.10 times such maximum annual principal and interest requirements on the Consolidated Transportation Bonds.

The first two paragraphs under "ADDITIONAL BONDS" in the "SUMMARY STATEMENT" of the Original Official Statement is hereby updated and restated by the following:

ADDITIONAL BONDS — In accordance with certain provisions of the Act (as defined in the "INTRODUCTION") the aggregate principal amount of Consolidated Transportation Bonds that may be outstanding is \$4,500,000,000. In addition, the Act provides that the General Assembly shall establish in the budget for any fiscal year the maximum outstanding aggregate amount of Consolidated Transportation Bonds of June 30 of the respective fiscal year that does not exceed \$4,500,000,000. As established in the budget for fiscal year 2023, the maximum aggregate amount of Consolidated Transportation Bonds that may be outstanding as of June 30, 2023 is \$3,321,205,000.

Upon issuance of the 2022 B Bonds and the refunding of the 2022 B Refunded Bonds on November 3, 2022, the outstanding amount of Consolidated Transportation Bonds will be \$3,494,220,000. With the payments of scheduled principal due on the Consolidated Transportation Bonds, the outstanding amount thereof will be less than the maximum amount allowed as of June 30, 2023.

The second paragraph in the "INTRODUCTION" section of the Original Official Statement is hereby updated and restated by the following:

The Bonds are obligations of the Department authorized to be issued pursuant to Sections 3-101 to 3-217, inclusive, of the Transportation Article of the Annotated Code of Maryland (2020 Replacement Volume as amended and supplemented from time to time) (the "Act"), by Section 8-209 of the State Finance and Procurement Article of the Annotated Code of Maryland (2021 Replacement Volume, as amended and supplemented from time to time) (the "State Finance and Procurement Article"), by resolutions of the Board of Public Works of Maryland (the "Board of Public Works") adopted on August 11, 2021 and by a resolution of the Secretary of Transportation (the "Secretary") dated as of September 15, 2021 (the "Resolution").

The "SECURITY" section of the Original Official Statement is hereby updated and restated by the following:

SECURITY

THE BONDS ARE NOT AND MAY NOT BE CONSIDERED TO CONSTITUTE A DEBT OR A PLEDGE OF THE FAITH AND CREDIT OF THE STATE OF MARYLAND, BUT SHALL BE PAYABLE, AS TO BOTH PRINCIPAL AND INTEREST, ONLY FROM THE PROCEEDS OF THE TAXES AND OTHER REVENUES LEVIED, IMPOSED, PLEDGED, OR MADE AVAILABLE FOR THAT PURPOSE.

FROM TIME TO TIME, THERE ARE LEGISLATIVE PROPOSALS IN THE GENERAL ASSEMBLY THAT, IF ENACTED, COULD ALTER THE DEPARTMENT'S SHARE OF THE PLEDGED TAXES.

The principal of and interest on the Bonds are payable from the proceeds of certain taxes that are levied by statute and irrevocably pledged to that exclusive purpose before being available for other uses. As provided in the Act, the taxes so pledged are: (i) the motor fuel tax revenue at the Base Tax Rate (as described under "THE TRANSPORTATION TRUST FUND — Taxes and Fees"), less 2.3% which is distributable to the Chesapeake Bay 2010 Trust Fund, and less 0.5% which is distributable to the Waterway Improvement Fund; (ii) the motor fuel tax revenue derived from increases in the tax rate above the Base Tax Rate based on annual changes in the Consumer Price Index; (iii) the motor fuel tax revenue attributable to the sales and use tax equivalent rate based upon the product of the average annual retail price, less state and federal taxes, and specified percentage rates; (iv) a portion of the revenues from the collection of the corporation income tax, (see below discussion on Chapter 397 and Chapter 240, each as defined herein); (v) the excise tax on the fair market value of certain motor vehicles, excluding trade in allowance, for which title certificates are issued, less 50% of the excise tax imposed on off-highway recreational vehicles which is distributed to the Off-Highway Recreational Vehicle Trail Fund and (vi) 45% of the revenue from the collection of the sales and use tax on short-term vehicle rentals. See "THE TRANSPORTATION TRUST FUND – Taxes and Fees" for a more detailed description of pledged taxes.

In addition, other receipts of the Department (excluding federal grants for capital projects, bond and note proceeds, or other receipts not available for debt service) are available to meet debt service if the pledged tax proceeds should become insufficient. See "THE TRANSPORTATION TRUST FUND — Taxes and Fees" for additional detail.

Chapter 397, Laws of Maryland 2011 enacted in the 2011 legislative session of the General Assembly ("Chapter 397") reduced the percentage of the State's corporation income tax allocated to the Department and eliminated the required distribution of the Department's revenues to the State's General Fund. In accordance with Chapter 397, effective July 1, 2016, the Department's share of the State's corporation income tax revenue was 17.2% ². Chapter 240, Laws of Maryland 2022 enacted in the 2022 legislative session of the General Assembly ("Chapter 240") increased the Department's portion of revenues from the State's corporation income tax and, as described further below, increased the amount of required capital transportation grants to the political subdivisions of the State. Effective July 1, 2023, the Department's portion of revenues from the State's corporation income tax revenue is set at 20%. Effective July 1, 2024, the Department's share is set at 21%; effective July 1, 2025, the Department's share is set at 22%; and effective July 1, 2027 and thereafter, the Department's share is set at 20%.

Chapter 397 also provided that, beginning July 1, 2012, except for distributions to the political subdivisions, funds could not be transferred from the Transportation Trust Fund to the General Fund unless legislation was first enacted to provide for the repayment of the funds within five years of the transfer. Chapter 429, Laws of Maryland 2013 enacted in the 2013 legislative session of the General Assembly ("Chapter 429") broadens this protection to include any transfers to a special fund or the General Fund and establishes a specific five-year repayment schedule for the funds, in lieu of the prior legislation requirement in Chapter 397. Chapter 429 provides additional Transportation Trust Fund protections by requiring in general that transfers from such fund to the General Fund or a special fund be approved by a three-fifth majority of specified full standing committees of both houses of the General Assembly. In the 2013 session, the General Assembly enacted Chapter 422, Laws of Maryland 2013 ("Chapter 422"), to amend the Maryland Constitution to further restrict the use of funds in the Transportation Trust Fund to debt service on bonds and any lawful purpose related to the State's transportation system unless the Governor, by executive order, declares a fiscal emergency exists and the General Assembly concurs, by a three-fifth majority of all elected members, with a different use or a transfer of the funds. Chapter 422 was adopted

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¹ Under previous law, effective July 1, 2008 through June 30, 2013 (i) 45% of the sales and use tax revenues on short-term vehicle rentals (after certain required distributions) and (ii) 5.3% of the remaining sales and use tax revenues after certain required distribution were pledged to the payment of debt service on Consolidated Transportation Bonds. However, pursuant to Chapter 397, the 5.3% of the remaining sales and use tax revenues (described in (ii) above) are not pledged to the payment of debt service on the Bonds or any other Consolidated Transportation Bonds issued on or after July 1, 2011 but remain pledged to the payment of debt service on Consolidated Transportation Bonds issued prior to July 1, 2011.

² Pursuant to Chapter 397, 24% of the corporation income tax, after required distributions, will continue to be pledged to the payment of debt service on Consolidated Transportation Bonds issued prior to July 1, 2011.

by a statewide referendum vote on the State ballot in November 2014.

The Gasoline and Motor Vehicle Revenue Account ("GMVRA") was established in statute to receive a portion of certain transportation revenues. Funds in the GMVRA are known as "highway user revenues" and were historically shared between the Department and the political subdivisions of the State. Chapter 330, Laws of Maryland 2018 enacted in the 2018 legislative session of the General Assembly, ended the revenue-sharing, directed 100% of the revenues in the GMVRA to the Department, and required the Department to provide capital transportation grants of an equal amount to the political subdivisions of the State based on the amount of revenue received in the GMVRA. The GMVRA remains the basis for the calculation; however, the capital grants may come from any funds within the Transportation Trust Fund. In FY 2023, an amount equivalent to 13.5% of the revenues received in the GMVRA must be provided to the political subdivisions of the State as capital transportation grants. Chapter 240 increases the calculation percentage to 15.6% in FY 2024, 18.0% in FY 2025, 20.0% in FY 2026 and FY 2027, and 15.6% in FY 2028 and thereafter. The Department's financial plan includes these changes. The capital transportation grants may only be made after all of the Department's debt service requirements and operating expenses have been funded and if sufficient funds are available to fund its capital program.

The tax proceeds and other revenues credited to the Transportation Trust Fund (except for airport passenger facility charge revenues, rental car customer facility charge revenues, and certain airport revenues) that are pledged to or otherwise available for debt service on Consolidated Transportation Bonds are further described under the heading "THE TRANSPORTATION TRUST FUND".

By the terms of the Act, the taxes that are retained to the credit of the Department and that are pledged to the payment of debt service on the Bonds may not be repealed, diminished or applied to any other purpose until the Bonds and the interest on them have been fully paid or adequate and complete provision for such payment has been made, but there is no obligation or undertaking required to increase the rate of the pledged taxes, or other receipts of the Department available for the payment of debt service, should the proceeds become insufficient for that purpose in the future.

The Department or the Maryland Transportation Authority (the "Authority") may pledge or use existing and anticipated federal funds for the payment of special transportation project revenue bonds or Authority bonds, respectively. The Act requires that bonds backed by federal aid may not exceed an aggregate principal amount issued of \$750,000,000 and the date of maturity of the bonds may not be more than 12 years. Bonds totaling \$750,000,000 have been issued and have fully matured. As such, there are no such bonds currently outstanding and no additional bonds may be issued. If future federal aid is insufficient to pay the principal of and interest on such special transportation project revenue bonds or such Authority bonds, the taxes levied under the Act will be irrevocably pledged to the payment of the principal and interest on debt secured by federal aid as it becomes due and payable, provided that the statutory lien and pledge created for the benefit of such special transportation project revenue bonds or such Authority bonds shall at all times be subordinate to the pledge and lien for the Bonds and for other Consolidated Transportation Bonds. See "THE TRANSPORTATION TRUST FUND —Special Revenue Bonds" for additional detail.

The Bonds are obligations of the Department only and, according to the provisions of the Act, are not and shall not be deemed to constitute a debt or pledge of the faith and credit of the State of Maryland. In Secretary v. Mancuso 278 Md. 81, 359 A.2d 79 (1976), the Court of Appeals of Maryland held that Consolidated Transportation Bonds are subject to the following limitations of Section 34 of Article III of the Maryland Constitution:

"No debt shall be hereafter contracted by the General Assembly unless such debt shall be authorized by a law providing for the collection of an annual tax or taxes sufficient to pay the interest on such debt as it falls due, and also to discharge the principal thereof within fifteen years from the time of contracting the same; and the taxes laid for this purpose shall not be repealed or applied to any other object until the said debt and interest thereon shall be fully discharged."

The Bonds will be of equal priority with previously issued and outstanding Consolidated Transportation Bonds and any additional Consolidated Transportation Bonds hereafter issued (the

"Additional Bonds"), with the exception as described above in footnotes 1 and 2 under "SECURITY" and below in "ADDITIONAL BONDS", as to the pledge of tax proceeds and other revenues of the Department for payment of debt service.

In accordance with the Act, the Department has determined to issue the Bonds without a debt service reserve component and to deposit in the statutory sinking fund for the Bonds only the amounts required to pay the principal of and interest on the Bonds as and when due.

The "CONSOLIDATED TRANSPORTATION PROGRAM" section of the Original Official Statement is hereby updated and restated by the following:

CONSOLIDATED TRANSPORTATION PROGRAM

The Department annually prepares a State Report on Transportation, which includes the Maryland Transportation Plan (the "MTP") and the CTP. The MTP is the Department's 20-year plan for the State's multi-modal transportation system that outlines the State's overarching transportation priorities and creates the framework for transportation decision making. The Department updates the MTP every five years. The MTP was last updated in January 2019 and can be viewed at www.maryland.gov/MTP. The CTP contains projects and programs across the Department and is developed within the framework of and is consistent with the MTP. As revenue estimates are revised during the year, the Department adjusts the capital program as necessary.

The CTP is updated twice per year by the Department. The Draft CTP is released September 1st each year. The Department visits every county and Baltimore City to present the Draft CTP each Fall between September 15th and November 15th. The Final CTP is submitted to the General Assembly each January. View the entire CTP at www.mdot.maryland.gov. The CTP contains estimates of expenditures for operating, constructing and improving transportation facilities during the current year, budget request year and the succeeding four-year period. Each year the CTP is developed in accordance with the current projection of six-year financial resources. Appropriations for the first fiscal year of each CTP are made by the General Assembly at its immediately preceding regular session as part of its review and approval of the State budget. See "STATE GOVERNMENT — Budget" for a discussion of the State's and the Department's budgetary practices.

Financial forecasts used in the CTP are based on currently available estimates of the Department's revenues; administrative, operating and maintenance expenditures; capital expenditures by the Department and its major grant recipients; and receipts of related federal funding. Twelve-month forecasts of all cash receipts and expenditures of the Department are updated quarterly, while six-year forecasts are updated semiannually.

The Draft CTP for fiscal years 2023-2028 (the "FY 2023-2028 Draft CTP" or "Draft CTP") is presented in the "TRANSPORTATION FACILITIES AND PROGRAMS" section below. In accordance with Maryland law, the Department is meeting with each county of the State to give local governments, legislative delegations, and the public an opportunity to comment on the Draft CTP. The FY 2023-2028 Draft CTP totals \$19.9 billion, an increase of \$2.2 billion from the FY 2022-2027 Final CTP. This \$2.2 billion increase reflects Maryland's continued recovery from the COVID 19 pandemic, changes to the Department's share of the State's corporation income tax revenue and increased federal funding levels from the passage of the Infrastructure Investment and Jobs Act ("IIJA"). The FY 2023-2028 Draft CTP is the Department's largest six-year capital program in its history.

The "TRANSPORTATION FACILITIES AND PROGRAMS" section of the Original Official Statement is hereby updated and restated by the following:

TRANSPORTATION FACILITIES AND PROGRAMS

A capital program summary of the FY 2023–2028 Draft CTP is presented below (\$ in millions):

Expenditures	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	TOTAL
The Secretary's Office	\$72.0	\$46.5	\$14.2	\$13.0	\$12.8	\$10.0	\$168.4
Motor Vehicle Administration	38.0	35.4	9.9	9.7	8.9	9.7	111.5
Maryland Aviation Administration	277.9	253.0	222.2	125.2	84.7	103.7	1,066.8
Maryland Port Administration	269.0	408.5	276.1	184.6	106.5	110.0	1,354.7
Maryland Transit Administration	870.8	815.6	697.8	651.3	665.6	549.6	4,250.6
Washington Metro Area Transit	462.3	469.4	474.1	482.0	489.7	496.9	2,874.4
State Highway Administration	1,475.6	1,498.6	1,554.7	1,884.6	1,863.5	1,768.7	10,045.8
Total	3,465.5	3,527.0	3,248.9	3,350.4	3,231.7	3,048.6	19,872.2
Sources							
Special Funds ¹	\$1,358.3	\$1,594.3	\$1,530.6	\$1,581.5	\$1,623.1	\$1,611.3	\$9,299.1
Federal Funds	1,471.4	1,302.7	1,177.9	1,365.6	1,298.2	1,127.7	7,743.4
Other ²	635.8	630.0	540.4	403.3	310.5	309.6	2,829.7
Total	3,465.5	3,527.0	3,248.9	3,350.4	3,231.7	3,048.6	19,872.2

Note: Totals may not add due to rounding.

State Highway Administration

The State highway system, totaling 5,715 miles, or over 17,000 lane miles of roadway including ramps, spurs and service roads, and 2,617 bridges, consists of the interstate, primary and secondary highway systems excluding Authority and locally owned facilities. The interstate and primary highway systems serve the major interstate and intrastate travel flows. The secondary highway system provides a network of routes for local travel.

The SHA is responsible for project development, construction and maintenance of the State highway system. The State is divided into seven engineering districts, with each district responsible for its own routine physical maintenance, traffic services and construction supervision. Specialized activities are assigned to statewide operating divisions and sections.

The majority of federal funding for highway construction is apportioned to the states based upon formulas set by federal law. Within the limits of those apportionments, projects are generally eligible for 80% federal participation. See "THE TRANSPORTATION TRUST FUND - Federal Aid" for further information on federal aid to the Department. The allocation of funds to the SHA's highway capital program (excluding highway maintenance costs, which are accounted for as operating expenditures) is \$10,045,769,000 for the FY 2023-2028 Draft CTP. The Draft CTP anticipates that \$5,515,695,000 will be provided by federal grants and \$4,440,068,000 will be provided from other resources of the Department and \$90,006,000 from non-Federal, non-Departmental sources.

¹ Includes projected bond sales.

² Other funding not received through the Transportation Trust Fund. Includes some funds from Customer Facility Charges, Passenger Facility Charges, County contributions, special transportation project revenue bonds and federal funds received directly by WMATA (defined herein) that are not included in the Department's budget.

Op Lanes Maryland. The I-495 & I-270 Public-Private Partnership (P3) Program, known as Op Lanes Maryland, is the largest component of Maryland's Traffic Relief Plan. Op Lanes Maryland was established to accomplish the specific goals of reducing congestion, minimizing impacts to the highway corridor, and accelerating delivery while pursuing innovative approaches at no net cost to the State of Maryland. In its entirety, Op Lanes Maryland proposes to improve more than 70 miles of interstate in Maryland including I-495 (Capital Beltway) from south of the George Washington Memorial Parkway in Virginia, including replacement of the American Legion Bridge, to the Woodrow Wilson Bridge, and I-270 (Dwight D. Eisenhower Memorial Highway) from I-495 to I-70, including the east and west I-270 spurs. Improvements are intended to reduce congestion on these overloaded interstates, allowing people and goods to reach their destinations faster and removing overflow traffic from the local roads.

After extensive coordination with Montgomery, Frederick, and Prince George's Counties, SHA's primary focus is Phase 1 of Op Lanes Maryland, also known as the New American Legion Bridge I-270 Relief Plan. Phase 1 includes 37 miles of highway improvements that will be broken into multiple smaller sections with "Phase 1 South" from the vicinity of the George Washington Memorial Parkway across the American Legion Bridge to I-370. "Phase 1 North" includes the remaining improvements to I-270, from I-370 to I-70.

In June 2019, the Board of Public Works approved the public-private partnership designation and solicitation method. In January 2020, the Board of Public Works provided a supplemental approval for the delivery of the project through the solicitation of a phase developer under a phased delivery approach. On August 11, 2021, the Board of Public Works approved the Phase Public-Private Partnership Agreement with Accelerate Maryland Partners to allow predevelopment work to proceed. Predevelopment work includes robust collaboration with stakeholders and identification of the best ways to advance the preliminary design and due diligence activities to further avoid and minimize impacts to environmental resources, communities, properties, utilities, and other features. After completion of the predevelopment work, Board of Public Works approval will be sought for a Section Public-Private Partnership Agreement for final design, construction, financing, operations, and maintenance of Phase 1 South. The developer will retain the revenue risk for the project and all debt of the project will be backed by toll revenue and be non-recourse to the State and to the Department.

On March 1, 2021, one of the proposers that was not selected filed a protest against the award of the Phase Public-Private Partnership Agreement. The Protester continues to appeal the decisions denying their protest and there are currently cases pending in the Montgomery County Circuit Court and the Court of Special Appeals. Additionally, on October 11, 2022, a lawsuit was filed challenging the project's Record of Decision. The Department will continue to vigorously defend itself in these cases.

Maryland Transit Administration

The mission of the MTA is to provide safe, efficient, and reliable transit across Maryland with world-class customer service. To achieve this, the MTA operates one of the largest multi-modal transit systems in the United States. MTA operates local buses (CityLink and LocalLink), commuter buses, Light RailLink, Metro SubwayLink, Maryland Area Regional Commuter ("MARC") train service, and a comprehensive Paratransit (MobilityLink) system. MTA also manages the Taxi Access system and directs funding and State-wide assistance to locally operated transit systems in each of Maryland's 23 counties, Baltimore City, Annapolis and Ocean City. The combined ridership for MTA's services in fiscal year 2022 was approximately 49.5 million, which was an increase from fiscal year 2021 as ridership continues to recover from declines related to the COVID-19 pandemic. MTA ridership in 2022 has been increasing across the network compared to the year prior: all MTA transit increased 17% with MARC up 143%, Commuter Bus up 86% and Core Local Bus up 13%.

Capital allocations for the MTA in the FY 2023-2028 Draft CTP total \$4,250,579,000, of which \$1,754,818,000 is expected from federal grants, \$2,337,572,000 from other resources of the Department and \$158,189,000 from non-federal, non-Departmental sources.

Bus Service. MTA provides bus services with approximately 760 MTA-owned fixed route buses for service in the Baltimore region. MTA contracts with private operators to provide commuter bus service from Anne Arundel, Calvert, Charles, Howard, Queen Anne's and St. Mary's Counties to Washington, D.C., and from Frederick and Washington Counties to Montgomery County. Additional contract service is provided from Baltimore, Harford and Howard Counties to Baltimore City. The MTA also contracts service on the Intercounty Connector corridor, serving Frederick, Montgomery, Prince George's and Anne Arundel Counties. These services collectively comprise the "Commuter Bus Program." The Commuter Bus Program is run with approximately 300 contractor-provided over-the-road style coaches, of which 5 are MTA-owned. The combined ridership for the Baltimore region and commuter bus services in fiscal year 2022 was 40.9 million. Since August 30, 2021, the Commuter Bus program has operated a nearly full schedule with 603 daily one-way trips. The FY 2023-2028 Draft CTP provides for core bus system improvements in the Baltimore area totaling \$1,002,962,000 including the annual purchase of replacement buses, information technology upgrades, communication equipment and other bus-related improvements and equipment. The federal government is expected to contribute \$522,708,000, \$17,680,000 is expected from non-federal, non-Departmental sources and the Department is expected to provide the remaining \$462,574,000 for these improvements.

Light RailLink. The MTA operates a 28.3-mile light rail line which provides transit service from Hunt Valley north of Baltimore City, through the City to Cromwell Station south of the City, with spurs to Penn Station in Baltimore and BWI Marshall Airport. Fifty-three (53) light rail cars currently operate on the entire system. The fiscal year 2022 light rail ridership was approximately 2.9 million. The FY 2023-2028 Draft CTP includes \$351,776,000 for rolling stock rehabilitation as well as track and other improvements including electrical systems, stations, parking, maintenance facilities, and preservation and enhancement studies. The federal government is expected to contribute \$112,058,000 and \$239,718,000 is expected to be provided from other resources of the Department.

Metro SubwayLink. The MTA operates a rapid transit system with 94 rapid rail cars on 14.8 miles of subway line in Baltimore City and Baltimore County (the "Baltimore Metro"). Fiscal year 2022 Baltimore Metro ridership was approximately 1.6 million. The Draft CTP includes \$611,673,000 for rolling stock rehabilitation as well as rail system construction and preservation of which the federal government is expected to contribute \$230,212,000, \$15,043,000 is expected from non-federal, non-Departmental sources and the Department is expected to provide the remaining \$366,418,000.

Mobility/Paratransit Service. The Mobility/Paratransit service is for citizens with disabilities who are unable to use local bus, subway or light rail service. This service is provided by the MTA via contracts with Transdev, MV Transportation and First Transit. The Draft CTP includes \$64,345,000, primarily for vehicle procurement and rehabilitation. The federal government is expected to contribute \$29,961,000, with the remaining \$34,384,000 provided from other resources of the Department.

Purple Line Transit Project (Purple Line). The Purple Line is a 16.2 mile east-to-west light rail line that runs across Montgomery and Prince George's counties just inside the I-495/Capital Beltway in the Washington, D.C. metropolitan area. It will provide a direct connection to Metrorail's Red, Green, and Orange lines and to MARC, Amtrak and local bus services. In 2016, the Department and the MTA entered into a Public-Private Partnership with Purple Line Transit Partners ("PLTP") for the design, construction, financing, operations, and maintenance of the Purple Line over a six-year design and construction period and a 30-year operating period.

Following a number of project delays and challenges, PLTP's contract with its design-builder was terminated and the State assumed approximately 150 contracts from the design-builder to continue the delivery of the Purple Line, safeguard its investment, and make the project site safe for the public. Concurrently, PLTP completed a selection process for a new design-build contractor. In December 2020, the Board of Public Works approved a settlement agreement that resolved all outstanding claims, provided a \$250 million settlement payment to the design-build contractor, and provided for completion of the project with a new design-build contractor. In January 2022, the Board of Public Works approved an amended Public-Private Partnership Agreement that extended the construction term by four years and

provided for an updated financing plan. On April 14, 2022, financial and commercial close of the amended Public-Private Partnership Agreement was achieved.

Agency-wide. The Draft CTP includes \$716,497,000 for agency-wide preservation and enhancement projects across facilities, joint development projects and community enhancement projects. Of this amount \$114,791,000 is the federal share, \$55,511,000 is from non-federal, non-Departmental sources, and \$546,195,000 is from other resources of the Department.

Information Technology. The MTA is working on many security and information technology initiatives. The Draft CTP includes \$37,040,000 for these initiatives, which will be provided by resources of the Department.

Commuter Rail. The MTA operates the MARC rail service on the Penn, Camden and Brunswick lines through contracts with Amtrak and Bombardier (operating on CSX railroad company lines). Amtrak operates commuter rail service from Perryville in Cecil County to Washington, D.C. Bombardier operates commuter rail service from Baltimore City, Frederick, Maryland, and Martinsburg, West Virginia to Washington, D.C. MARC ridership was approximately 2.3 million passengers in fiscal year 2022.

Passenger rail capital allocations for the Draft CTP period are \$537,445,000, of which \$402,608,000 is expected to be provided by federal grants, \$1,440,000 from non-federal, non-Departmental sources and \$133,397,000 from other resources of the Department.

Freight. The Department supports the operations of certain rail freight lines through direct subsidies to short line rail operations and rehabilitation of components of these lines. Allocations for the rail freight capital program for the Draft CTP period are \$13,970,000, of which \$2,500,000 is expected to be provided by federal grants, \$315,000 from non-federal, non-Departmental sources and \$11,155,000 from other sources of the Department.

Statewide Grants. Department aid is available to qualifying local public and non-profit agencies for the planning, capital and operating costs of public transportation projects. Where federal grants are available for planning and capital costs, the Department will provide up to 80% of the non-federal share of approved costs. Allocations for statewide public transit grants for the Draft CTP period total \$194,586,000, of which \$170,822,000 is expected from federal grants and \$23,764,000 from other resources of the Department.

Washington Metropolitan Area Transit Authority Grants

Washington Suburban Transit District

The Department provides financial aid for the construction and operation of the regional rail and bus system of the Washington Metropolitan Area Transit Authority ("WMATA") serving Montgomery and Prince George's Counties in Maryland, the District of Columbia, and the local jurisdictions in Virginia which participate in the Northern Virginia Transportation Commission. Prince George's and Montgomery Counties in Maryland comprise the Washington Suburban Transit District ("WSTD"). The Washington Suburban Transit Commission ("WSTC"), created by State law to manage and control the functions and affairs of the WSTD, is empowered to provide funds to meet the WMATA obligations allocated to WSTD. The Department provides grants to fund Maryland's share of WMATA's base capital costs and operating costs and provides additional dedicated capital funds first implemented in fiscal year 2020.

WMATA Capital Improvement Program and Dedicated Funding. The Capital Improvement Program includes both the former Infrastructure Renewal Program ("IRP") and the System Access Plan ("SAP"), as well as additional dedicated capital funding of \$500,000,000 in total from Maryland, the District of Columbia, and the local jurisdictions in Virginia. A six-year capital funding agreement currently effective for fiscal year 2023-2028 funds the IRP and SAP on an ongoing basis. Projects include all system infrastructure, rolling stock, vehicles and equipment. The FY 2023-2028 Draft CTP provides for an estimated expenditure of \$2,874,410,000 including \$730,830,000 in federal funds received by WMATA directly.

Operating Deficit Assistance. The Department estimates that its share of WMATA's operating cost for fiscal years 2023-2028 will be \$2,911,000,000, of which \$452,122,000 is required for fiscal year 2023.

Debt Service Assistance. In the FY 2023-2028 Draft CTP, the Department will contribute \$187,515,000 for debt repayment on long term bonds issued for WMATA's Metro Matters Program, a regionally funded program for capital improvements completed primarily during fiscal years 2005 through 2010 and two recent debt offerings, in 2017 and 2018. This amount is included in the WMATA Capital Improvement Program numbers above.

Maryland Port Administration

The Port of Baltimore is served by highway and major railroad systems and offers two distinct water approach routes to or from the Atlantic Ocean: from the south through the Virginia Capes and from the north through the Chesapeake and Delaware Canal.

The MPA has constructed and currently operates marine terminals in the Port of Baltimore as well as an automobile handling facility. The Draft CTP includes major projects for the improvement and expansion of some of these terminals at a six-year cost of \$676,107,000. Of this amount, \$171,707,000 will be from federal grants, \$221,534,000 is expected to be from other resources of the Department and \$282,866,000 from non-Federal non-Departmental sources. Major project expenditures related to dredging, including dredged material containment site-work, are projected to be \$462,671,000 for the six-year period. Minor projects (rehabilitation and system preservation) at the MPA's various marine terminals are also included in the Draft CTP at a cost of \$215,500,000 and additional cost to support the implementation of the projects. The total FY 2023-2028 Draft CTP for the MPA is \$1,354,738,000.

In December 2009, the MPA awarded a public-private partnership long-term lease to Ports America valued at \$1,300,000,000. The lease allows Ports America to operate Seagirt Marine Terminal for a 50-year period. Ports America's subsidiary, Ports America Chesapeake, constructed a 50-foot-deep berth and purchased and installed four new cranes at the Seagirt Marine Terminal to accommodate larger ships from Asia that call on East Coast ports. As part of the agreement, Ports America will invest more than \$600,000,000 in port-related infrastructure improvements over the 50-year lease life and made an upfront payment of \$140,000,000 to fund Maryland Transportation Authority projects, which allowed MPA to take ownership of Seagirt Marine Terminal.

Though not required under the public-private partnership lease, in 2021, Ports America Chesapeake completed work on a second 50-foot-deep berth and installation of related infrastructure to provide greater capacity and efficiency to handle the increased container volumes. In 2009, Seagirt handled 257,367 containers. In 2020, after the first 10 years of the lease, Seagirt handled 628,132 containers, an increase of 144%. In addition to the new Seagirt berths, a project is currently underway to expand Baltimore's Howard Street Tunnel, which will allow double-stacked container rail cars to travel to and from the Port of Baltimore. This project, a partnership of CSX, Maryland, the federal government, and others, is expected to increase the Port's container business by about 160,000 containers annually and will provide double-stack capacity from Maine to Florida.

In June 2006, the Department entered into a \$26,530,000 conditional purchase agreement to construct a 215,000-square-foot warehouse facility at the MPA South Locust Point Terminal. The project included demolition, land preparation, construction of a roll-on/roll-off ramp at the dock and extending railroad tracks to the warehouse. In accordance with provisions of the conditional purchase agreement, forest product revenue at the South and North Locust Point Terminals currently covers the debt service payments. Refunding Series 2016 Certificates of Participation refunded the 2006 MPA conditional purchase agreement for the warehouse in December of 2016.

Maryland Aviation Administration

Baltimore/Washington International Thurgood Marshall Airport

BWI Marshall Airport, operated by the MAA, is located on a 3,596-acre site in Anne Arundel County, 9 miles south of central Baltimore and 32 miles northeast of central Washington, D.C. During fiscal year 2022, 21.5 million passengers traveled through BWI Marshall Airport, flying on 19 scheduled airlines to 88 destinations, averaging 241 daily departures. In fiscal year 2022, cargo airlines had a 1% decrease in tonnage. BWI Marshall Airport set a twelve-month traffic record of 27.2 million passengers for the year-ended February 2020. The COVID-19 pandemic reduced passenger traffic significantly beginning in March 2020; however, with continued recovery, passenger traffic in June 2022 was down only 18% from the prepandemic traffic in June 2019.

The FY 2023-2028 Draft CTP funding for MAA totals \$1,066,790,000, which includes \$851,113,000 in major improvements at BWI Marshall Airport consisting of regional aviation, noise mitigation expansion, shuttle bus replacements, including electric bus charging infrastructure, pavement projects, and fuel storage tank expansion. Major terminal modernization improvements in the Draft CTP include construction of the Concourse A/B Connector and Baggage Handling System, Restroom Renovations and the Aircraft Maintenance Facility Infrastructure.

Revenue Bonds issued by the Maryland Economic Development Corporation ("MEDCO") and Parking Bonds issued by the Authority were refunded in February 2021 with Special Transportation Project Refunding Revenue Bonds Series 2021A issued by the Department. The MEDCO, Parking and Passenger Facility Charge ("PFC") Revenue Bonds issued by the Authority were used to complete the Concourses A and B expansion, the construction of the daily garage, and improvements to the terminal and access roadwork. Additional PFC bonds were issued by the Authority in April 2012 and used along with PFC revenues and federal grants to finance improvements to Concourse C. In December 2012, PFC bonds were issued by the Authority to finance construction of airfield improvements and make improvements to runway and connective airfield pavement; in December 2014, PFC bonds were issued for improvements to Concourses D and E; and in June 2019 PFC bonds were issued to finance improvements to restrooms, add 5 gates on Concourse A, and various concourses improvements. The Department issued Special Transportation Project Revenue Bonds Series 2021B in July 2021 to finance the Concourse A/B Connector and Baggage Handling System project. See "CONDITIONAL PURCHASE AND LEASE FINANCINGS" for summaries of these bond financings.

The Aviation Safety and Capacity Expansion Act of 1990 (the "1990 Safety Act"), enacted by the United States Congress ("Congress"), allows a public agency to impose an airport PFC for enplaned passengers. The proceeds of such PFCs are to be used to finance eligible airport-related construction projects, as approved by the Federal Aviation Administration (the "FAA").

The Aviation Investment and Reform Act for the 21st Century, enacted by Congress in April 2000, together with the 1990 Safety Act, increased the maximum per passenger PFC allowed to be charged by qualifying airports from \$3.00 to \$4.50. In 1992, the MAA received FAA approval to collect PFCs at BWI Marshall Airport. In 2002, the MAA received FAA approval to increase its collection level to \$4.50. The FAA further allows the MAA to impose and use PFCs for the payment of debt service for bonds used to fund PFC approved projects. PFC collections not needed for debt service are used for PFC approved paygo projects.

The CTP also anticipates expenditures of \$134,300,000 for airport planning and preservation of both BWI Marshall Airport and Martin State Airport, of which \$6,800,000 is expected from federal grants, \$125,000,000 from other resources of the Department and \$2,500,000 from non-Departmental revenue sources.

Other Aviation Facilities and Programs

Martin State Airport is located northeast of Baltimore in Baltimore County and provides facilities for general aviation and the Maryland Air National Guard. Improvements amounting to an estimated

\$37,563,000 are allocated in the Draft CTP to Martin State Airport. It is estimated that \$16,268,000 would be provided by federal grants and \$21,295,000 from other resources of the Department.

In 2008, the MAA updated the Maryland Aviation System Plan, a 20-year comprehensive review of Maryland's airport system which includes all public-use landing facilities. The Maryland Aviation System Plan is a planning document to preserve and expand a safe and efficient system of airports. A grant program to aid general aviation and commercial airports throughout the State, in keeping with the Maryland Aviation System Plan, is funded at \$13,751,000 in the Draft CTP.

Motor Vehicle Administration

The MVA is responsible for providing motor vehicle services to the citizens of the State. These services include licensing all eligible and qualified drivers, issuing photo identification cards for non-driver residents, registering and titling vehicles, issuing tags and permits for persons with a disability, regulating motor vehicle dealerships and salespersons, administering the compulsory insurance compliance program, managing the Vehicle Emissions Inspections Program ("VEIP"), and conducting driver safety programs. The MVA serves its customers through a network of 24 MVA offices, a mobile service center, a suite of electronic services (self-service kiosks, internet, and telephone customer service center), United States Postal Mail, County Treasurer offices, 18 VEIP stations, motorcycle safety training centers, Electronic Registration and Titling System participants and licensed title service agencies.

The MVA manages approximately 27.2 million driver, vehicle and identification card records, including those not currently registered. During fiscal year 2022, 1.1 million new and renewal driver's licenses and identification cards, 4.0 million new and renewal vehicle registrations, and approximately 1.0 million new titles were issued. MVA customers currently complete 74.7% of core service transactions by using United States mail, telephone, internet, kiosk, mobile office or County Treasurer offices, with the remaining transactions conducted at MVA customer facilities.

The FY 2023-2028 Draft CTP has \$111,501,000 programmed for MVA capital projects, of which \$54,200,000 is allocated to preserve and develop the MVA's information technology ("IT") infrastructure, and the remaining \$46,900,000 will allow for the preservation and improvement of customer service offices. While IT infrastructure is critical to how a growing number of customer transactions are completed at the MVA, customer service facilities continue to be an important part of service distribution. In December 2021, MVA completed its information technology modernization known as Customer Connect, expanding online information access and service, while continuing appointment-based operations. Customers and employees can have a complete view of the customer's status and history with the MVA via linked driver and vehicle accounts, conduct more online transactions than ever before, and/or select from a list of services and schedule appointments at convenient MVA locations. MVA has also partnered with other Maryland agencies to become a "one-stop-shop" for many services. The Department of Natural Resources, the Authority, and the Department of Veteran Affairs have all opened customer service centers within MVA branches across the State and offer their products on MVA's eStore and kiosks.

The Secretary's Office

Capital projects funded in the Secretary's Office largely consist of Department-wide projects to improve air quality, promote bicycling as a mode of transportation and facilitate transit-oriented development. The Secretary's Office includes multi-modal planning efforts and grants either given from the Secretary or received by the Department for key projects around the State.

Capital allocations for the Secretary's Office in the FY 2023-2028 Draft CTP total \$168,407,000, of which \$7,108,000 is expected from federal grants, \$159,458,000 from other resources of the Department and \$1,841,000 from non-federal, non-Departmental sources.

MEDCO issued lease revenue bonds in 2002 and in 2010 on behalf of the Department to finance and refinance the construction and equipping of the Department's headquarters building. These bonds were fully repaid in fiscal year 2022.

The paragraph on the Corporation Income Tax under the "Taxes and Fees" subsection of the "THE TRANSPORTATION TRUST FUND" section of the Original Official Statement is hereby updated and restated by the following:

4. Corporation Income Tax — The percentage distribution of the revenues derived from the State's 8.25% corporation income tax after certain General Fund reductions will be 17.2% in fiscal year 2023, 20.0% in fiscal year 2024, 21.0% in fiscal year 2025, 22.0% for fiscal years 2026 and 2027 and 20.0% in fiscal year 2028 and thereafter.

The "Federal Aid" subsection of "THE TRANSPORTATION TRUST FUND" section of the Original Official Statement is hereby updated and restated by the following:

Federal Aid

Federal aid, representing 39% of the total funding in the Department's TTF, supports the multimodal investments in the FY 2023-2028 Draft CTP. The continued support of the Federal Highway Trust Fund is critical to the Department's ability to enhance, improve, and rebuild State infrastructure to compete in a modern economy.

The FY 2023-2028 Draft CTP is based on the spending levels and contract authority under the federal highway program at the time entitled Fixing America's Surface Transportation Act (the "FAST Act") and the Infrastructure Investment and Jobs Act ("IIJA"). Federal highway program funds authorized and apportioned to the states are subject to annual ceilings, which determine how much of the authorized money can be obligated in any given year. This ceiling is referred to as Obligational Authority ("OA") and is imposed by Congress annually in response to prevailing economic policy. Since fiscal year 2004, the Department's OA has ranged from 84% to 95%. The Draft CTP assumes an OA level of 90.0% for fiscal years 2023 – 2028.

Under the FAST Act, the Department received an authorization for federal aid for the highway program, primarily for interstate, primary, secondary and urban systems, bridge replacement, highway safety, and congestion mitigation/air quality improvement. All available federal aid was utilized, and no federal aid has been lost for lack of a State match. The FAST Act originally authorized federal aid for federal fiscal years 2016 through 2020 and subsequently was extended for one year through federal fiscal year 2021. On November 15, 2021, Congress reauthorized federal surface transportation programs in the IIJA, providing authority for spending to continue through fiscal year 2027. Congress approved an annual appropriation bill which finished the formula funding portion of the IIJA in March 2022. Some new programs received authorization and appropriation but needed guidance/rules/regulations to allow the funding to be released. The guidance and funding levels for the following programs were released incrementally throughout the first half of 2022: the new formula bridge program for poor and fair rated bridges; the Highway Safety Improvement Program; the Carbon Reduction Program; and the National Highway Performance Program and Surface Transportation Block Grant Program. It should be noted that the IIJA provides for the transfer of General Fund resources to stabilize the federal Highway Trust Fund and provides an increase in authorized spending levels utilizing both the Highway Trust Fund and additional advance appropriations using General Funds. Apportionments have been released for programs for which implementation guidance has been provided, while some apportionments still have not been made available to the Department.

The Federal Transit Administration provides transit operating and capital assistance for bus, metro, light rail, and commuter rail. Federal grants are also provided for rural areas as well as elderly and handicapped persons. Federal entitlement and discretionary funding for airport projects are provided by the FAA through the Airport Improvement Program (AIP). IIJA has included formula-based AIP funding for the next five years.

The Department has been awarded in the past, and will continue to apply for, various federal grant

programs. The Department was awarded federal funds under the Infrastructure for Rebuilding America (INFRA) grant program. INFRA is another discretionary grant program administered by United States Department of Transportation for nationally and regionally significant freight projects. An INFRA grant of \$125,000,000 was awarded to Maryland for the expansion of the Howard Street Tunnel. These funds allow the State to partner with CSX Transportation in the reconstruction of the tunnel that will provide the height requirements needed for double stacked containers to travel to and from the Port of Baltimore.

The Department also receives federal funding from the United States Department of Homeland Security for various transit, port and driver services security projects. Federal Emergency Management Administration manages several grant programs that award funding to improve security and disaster preparedness across the State transportation network.

The United States government took legislative and regulatory actions and implementing measures to mitigate the broad disruptive effects of the COVID-19 pandemic. The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), approved by the United States Congress and signed by the President of the United States on March 27, 2020, is one such legislative measure to address the crisis created by the pandemic and includes direct aid in the form of grants for transit and airports as well as a number of other provisions. The MTA received \$392,000,000 from the CARES Act that was fully utilized in fiscal years 2020 and 2021. The MAA received \$87,600,000 from the CARES Act for BWI Marshall Airport and \$157,000 for Martin State Airport, which was fully expended in fiscal year 2020. In addition, the State of Maryland received funds through the CARES Act, of which \$28,200,000 was provided to the Department to reimburse certain COVID-related expenses, including premium and response for essential employees.

On December 27, 2020, the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (the "CRRSAA") was signed into law by the President of the United States. The CRRSSA included \$233,100,000 in total grants to the Department including funding for MTA, MAA, and SHA. Those funds were utilized in fiscal years 2021 and 2022.

On March 11, 2021, the American Rescue Plan Act of 2021 (the "ARPA") was signed into law by the President of the United States. The ARPA includes \$436,400,000 in total grants to the Department including funding for MTA, MAA, and SHA. Those funds are being utilized in fiscal years 2022 through 2024. The ARPA also provided \$350,000,000,000 in Coronavirus State and Local Fiscal Recovery Funds to help states, local government, U.S. territories and tribal governments cover increased expenditures, replenish lost revenue and mitigate economic harm from the COVID-19 pandemic. The State of Maryland received \$3,900,000,000. The Governor of Maryland announced a joint executive and legislative plan for use of the State of Maryland's allocation of Coronavirus State and Local Fiscal Recovery Funds that includes \$500,000,000 for transportation to offset revenue losses. The Department will utilize this funding in fiscal years 2022 and 2023.

The major federal fund receipts for the capital program including federal funds for local governments in fiscal year 2022 are estimated to be \$1,380,329,235. Projected receipts for fiscal year 2023 are \$1,309,895,120.

The federal subsidy for the Department's Consolidated Transportation Bonds, Series 2010 B (Federally Taxable – Issuer Subsidy – Build America Bonds) has been reduced since October 1, 2012, in an amount ranging from 5.7% to 8.7%. The federal subsidy was reduced by 5.7% in the federal fiscal year starting October 1, 2020 and is expected to continue through maturity of such bonds in 2025.

The "Consolidated Transportation Bonds" subsection of "THE TRANSPORTATION TRUST FUND" section of the Original Official Statement is hereby updated and restated by the following:

Consolidated Transportation Bonds

In accordance with certain provisions of the Act, the aggregate principal amount of Consolidated Transportation Bonds that may be outstanding is \$4,500,000,000. In addition, provisions of the Act provide for the General Assembly to establish in the budget for any fiscal year a maximum outstanding

aggregate amount of these bonds as of June 30 of the respective fiscal year that does not exceed \$4,500,000,000. As established in the budget for fiscal year 2023, the maximum aggregate amount of Consolidated Transportation Bonds that may be outstanding as of June 30, 2023 is \$3,321,205,000.

The "PLEDGED TAXES & NET REVENUES" section of the Original Official Statement is hereby updated and restated by the following:

PLEDGED TAXES & NET REVENUES

As described above under "SECURITY", portions of the corporation income tax, motor fuel tax, motor vehicle titling tax and sales and use tax on short-term rental vehicles are irrevocably pledged to payment of debt service on the Department's bonds. Consolidated Transportation Bonds issued prior to July 1, 2011 have additional security (see note 1 under "SECURITY"). See "SECURITY" for a discussion of changes to TTF revenues enacted by the General Assembly. From time to time, there are legislative proposals in the General Assembly that, if enacted, could alter the Department's share of the taxes.

The following table lists the total amount of such taxes credited to the TTF for the past five fiscal years, including estimated numbers for fiscal year 2022 and the forecast for fiscal year 2023 (in thousands). These taxes would be the amounts upon which the Additional Bonds test relating to total proceeds from pledged taxes would be based. (See "FINANCIAL AND ACCOUNTING SYSTEM" for a general description of the budgetary basis.)

-						
Taxes Pledged to Bonds	2018	2019	2020	2021	2022 1	2023 ²
Corporation Income Tax	\$135,321	\$170,452	\$191,739	\$267,065	\$310,717	\$308,115
Fuel Tax	987,506	1,043,835	1,050,605	998,216	1,082,520	1,230,936
Titling Tax	813,673	857,453	846,764	976,727	1,021,300	1,007,762
Sales and Use Tax	29,257	31,823	31,686	21,373	35,487	27,775
Total Pledged Taxes	\$1,965,757	\$2,103,563	\$2,120,794	\$2,263,381	\$2,450,024	\$2,574,588

¹ Unaudited number.

Note: Totals may not add due to rounding.

² Forecast for fiscal year 2023.

To the extent needed, other revenues credited to the Department are available for payment of debt service on the Department's bonds. These will be the amounts upon which the Additional Bonds test relating to net available revenues will be based. The following table lists the total of the two categories of revenues available for debt service on the Department's bonds; the Department's administration, operation and maintenance expenses paid from the TTF; and net revenues (in thousands).

	2018	2019	2020	2021	20221	2023 ²
Total Pledged Taxes	\$1,965,757	\$2,103,563	\$2,120,794	\$2,263,381	\$2,450,024	\$2,574,588
Fees						
Motor Vehicle Registrations	317,433	326,555	328,496	363,489	351,013	369,639
Other	287,720	297,699	259,156	272,388	299,547	286,240
Total Taxes and Fees	2,570,910	2,727,817	2,708,446	2,899,258	3,100,584	3,230,467
Operating Revenues:						
MPA	51,783	55,283	54,743	49,261	50,118	46,000
MTA	150,911	140,094	108,074	50,060	64,179	86,000
MAA	257,218	257,929	231,521	184,300	275,2723 ³	$301,000^3$
Total Operating Revenue	459,912	453,306	394,338	283,621	389,569	433,000
Other Revenue	60,566	56,543	49,418	122,454	112,255	58,359
Investment Income	2,322	2,928	1,918	0	0	0
Total Revenues	3,093,710	3,240,594	3,154,120	3,305,333	3,602,408	3,721,826
Administration, Operation and Maintenance Expenditures	1,949,416	2,127,967	1,743,017	1,684,215	1,578,522	1,891,389
Net Revenues	\$1,144,294	\$1,203,397	\$1,411,103	\$1,621,118	\$2,023,886	\$1,830,437

Note: Totals may not add due to rounding.

Certain of the fluctuations in the above tables are caused by institution of new programs and responsibilities of the Department, changes in tax and fee structures (See "THE TRANSPORTATION TRUST FUND"), and the influence of economic trends. The estimate for fiscal year 2022 and forecast for fiscal year 2023 are both based on the Department's financial plan released on September 1, 2022, which reflects Maryland's continued recovery from the revenue declines associated with the COVID-19 pandemic.

In 2021, Maryland total personal income increased at 5.6%, below the national increase of 7.5%. Between 2016 and 2021, total personal income in Maryland grew 4.1% annually, compared to a national growth rate of 5.6%. Maryland's slower income growth during this period likely reflects federal budget uncertainty, austerity or sequestration, and higher income tax rates. As sequestration eased, Maryland's personal income and economic growth became more consistent with that of the nation.

In 2020, a significant contraction in economic output occurred due to the COVID-19 pandemic and measures to contain it. However, a massive federal economic stimulus response kept aggregate personal income growing as households received income that has been put toward both savings and consumption.

¹Unaudited number.

² Forecast for fiscal year 2023.

³ Represents net revenues after debt service on airport revenue bonds.

In the spring of 2020 Maryland experienced its worst job losses since the Great Depression. In April employment declined 13.0% year over year. Employment rebounded during the summer and fall, though for the year 2020, employment remained down 6.8% year over year. In 2021, employment has further recovered and grew 2.5% though employment still remains below the prior peak. Maryland's employment recovery has been largely bifurcated, with sectors more directly affected by the pandemic (e.g., accommodations, food service) experiencing significant losses and other sectors experiencing more complete recoveries.

Based on an analysis of current economic projections, employment growth is forecasted to grow at an average annual rate of 1.0% through 2027, while personal income is forecasted to grow at an average annual rate of 4.6% over the same period.

The "OUTSTANDING INDEBTEDNESS" section of the Original Official Statement is hereby updated and restated by the following:

OUTSTANDING INDEBTEDNESS

As shown in the table below, Consolidated Transportation Bonds in the aggregate principal amount of \$3,494,220,000 will be outstanding upon issuance of the 2022 B Bonds on November 3, 2022. See also "THE TRANSPORTATION TRUST FUND — Consolidated Transportation Bonds" for a discussion of the limit on the maximum outstanding aggregate principal amount of Consolidated Transportation Bonds as of June 30, 2023, established by the budget.

Series 2010 B	\$50,400,000
Series 2015	19,445,000
Series 2015 (Second Issue)	91,695,000
Refunding Series 2015	64,510,000
Series 2015 (Third Issue)	226,435,000
Series 2016	289,765,000
Refunding Series 2016	122,290,000
Series 2017	216,950,000
Series 2017 (Second Issue)	348,665,000
Series 2018	114,930,000
Series 2018 (Second Issue)	557,345,000
Series 2019	461,595,000
Series 2020	300,000,000
Series 2021 A	295,000,000
Series 2021 B	139,210,000
Series 2022 A	52,400,000
Series 2022 B	143,585,000
Total	\$3,494,220,000

The "**DEBT SERVICE REQUIREMENTS AND ESTIMATED COVERAGES**" section of the Original Official Statement is hereby updated and restated by the following:

DEBT SERVICE REQUIREMENTS AND ESTIMATED COVERAGES

The following table presents debt service requirements and estimated coverage ratios for all Consolidated Transportation Bonds upon the issuance and delivery of the 2022 B Bonds on November 3, 2022. Maximum annual debt service is \$480,461,159 in fiscal year 2023. Net revenues (unaudited) for the fiscal year ending June 30, 2022, under the first test described above under "ADDITIONAL BONDS" would be 4.21 times maximum annual principal and interest requirements on such debt. Pledged taxes (unaudited) for the fiscal year ended June 30, 2022, under the second test described above under "ADDITIONAL BONDS" would be 5.10 times maximum annual principal and interest requirements on such debt. See "PLEDGED TAXES AND NET REVENUES" for detail on the Department's revenue. These coverage ratios are calculated on the basis of no further issuance of Consolidated Transportation Bonds.

Debt Service Requirements- Consolidated Transportation Bonds
(in thousands)Debt Service Coverage
Ratio Based Upon
FY 2022 Revenue¹

	Outstanding			2022		D	
T: 1	Bonds	G : 2022D I		2022B	Total	Pledged	Net
Fiscal	Principal	Series 2022B I	U	Refunded Bonds	Debt Service	Tax	Revenue
Year	& Interest	Principal	Interest	Debt Service	Requirements	Ratio ²	Ratio ³
2023	479,510	-	4,148	(3,197)	480,461	5.10	4.21
2024	428,957	17,565	6,740	(26,808)	426,454	5.75	4.75
2025	432,210	18,470	5,839	(26,813)	429,706	5.70	4.71
2026	413,474	19,415	4,892	(26,811)	410,970	5.96	4.92
2027	413,747	20,410	3,896	(26,810)	411,243	5.96	4.92
2028	402,894	21,455	2,850	(26,811)	400,388	6.12	5.05
2029	387,837	22,555	1,750	(26,813)	385,329	6.36	5.25
2030	358,139	23,715	593	(26,811)	355,636	6.89	5.69
2031	317,908	-	-		317,908	7.71	6.37
2032	289,167	-	-		289,167	8.47	7.00
2033	224,653	-	-		224,653	10.91	9.01
2034	168,748	-	-		168,748	14.52	11.99
2035	106,260	-	-		106,260	23.06	19.05
2036	59,646	-	-		59,646	41.08	33.93
2037	28,394				28,394	86.29	71.28

(190,874) \$ 4,494,961

\$ 30,708 \$

\$ 143,585

\$ 4,511,542

Total ⁴

⁽¹⁾ The general sales and use tax and corporation income tax affected by General Assembly changes in the 2011 Session are available to pay debt service on the Consolidated Transportation Bonds sold prior to July 1, 2011 (approximately \$50.4 million outstanding) if needed.

⁽²⁾ Pledged taxes (in thousands) were \$2,450,024 for fiscal year 2022 – unaudited number.

⁽³⁾ Net revenues (in thousands) were \$2,023,886 for fiscal year 2022 – unaudited number.

⁽⁴⁾ Totals may not add due to rounding.

The "CONDITIONAL PURCHASE AND LEASE FINANCINGS" section of the Original Official Statement is hereby updated and restated by the following:

CONDITIONAL PURCHASE AND LEASE FINANCINGS

The Department has from time to time financed the construction and acquisition of various facilities through conditional purchase, sale-leaseback, and similar transactions. Such transactions are subject to approval by the Board of Public Works. Financings of this type are as follows:

Conditional Purchase Financings	Projects	Issuance <u>Amount</u>	Outstanding as of June 30, 2022
Project Certificates of Participation (MPA), Refunding Series 2016	MPA South Locust Point Warehouse Construction – Refunded original 2006 issue	\$15,040,000	\$4,475,000
Project Certificates of Participation (MAA), Refunding Series 2010	BWI Marshall Airport Facilities	19,610,000	4,720,000
Project Certificates of Participation (MTA), Refunding Series 2010	MTA Rail Station Parking Garage at BWI Marshall Airport	13,070,000	4,270,000
Project Certificates of Participation (MAA), Series 2019	BWI Marshall Airport Shuttle Bus Fleet Acquisition	23,490,000	19,910,000
Total			\$33,375,000

All of the lease payments under these conditional purchase financings are subject to annual appropriation by the General Assembly. In the event that such appropriations are not made, the Department may not be held contractually liable for the payments.

Capital Leases	Projects	Issuance <u>Amount</u>	Outstanding as of June 30, 2022
MEDCO Refunding Lease Revenue Bonds, Series 2010	Construction of the Headquarters Building for the Department	\$22,715,000	\$0
Total Outstanding Leases with MEDC	O		<u>\$0</u>

The Department's payments to MEDCO for debt service on all MEDCO Refunding Lease Revenue Bonds were subject to the General Assembly's annual appropriation and were fully repaid in fiscal year 2022.

The Department has entered into several lease agreements as lessee for the financing of various projects at the BWI Marshall Airport. The Authority was the conduit issuer. Those financings are as follows:

Capital Leases	Projects	Issuance Amount	Outstanding as of June 30, 2022
Maryland Transportation Authority Taxable Consolidated Rental Car Facility Series 2002	Acquisition, construction and equipping of a new rental car facility	\$117,345,000	\$69,230,000
Maryland Transportation Authority Passenger Facility Charge Revenue Bonds Series 2012A	Finance a portion of the costs to construct a passenger connector hall between the secured Concourses B and C, expansion of Concourse C, and expansion and relocation of security checkpoint	50,905,000	30,660,000
Maryland Transportation Authority Passenger Facility Charge Revenue Bonds Series 2012B	Finance a portion of the cost of runway safety improvements and paving	92,070,000	37,010,000
Maryland Transportation Authority Variable Rate Passenger Facility Charge Revenue Bonds Series 2012C	Finance a portion of the cost of runway safety improvements and paving	43,400,000	43,400,000
Maryland Transportation Authority Passenger Facility Charge Revenue Bond Series 2014	Finance a portion of the cost to construct a passenger connector hall between the secure Concourses D and E	40,000,000	28,215,000
Maryland Transportation Authority Passenger Facility Charge Revenue Bonds Series 2019	Finance a portion of the cost of improvements to restrooms, concourses, and FIS Hall reconfiguration	108,705,000	101,285,000
Total Outstanding MAA Leases with t	he Authority		<u>\$309,800,000</u>

The Department's liability on the above leases may be less than the bonds outstanding due to cash on hand in certain restricted accounts held by the Authority. The revenues derived from rental car customer facility charges and passenger facility charges are pledged to the payment of the bonds financing these projects, respectively, and no other TTF revenues are pledged as security for these bonds.

Energy Performance Contracts (EPC):

The Department of General Services (DGS) implemented an Energy Performance Contract program for the Department in fiscal year 2011, with a goal to reduce Maryland's energy consumption through energy efficiency projects. The State Treasurer's Office secured the financing required to fund the construction of the improvements. The savings resulting from the projects are used to offset the financing costs. The SHA, MTA, MAA, MPA and the MVA participated in EPC. As of June 30, 2022, the total estimated amount due in long-term liability for EPC obligations was \$21,035,000.

The first two paragraphs under the "FINANCIAL AND ACCOUNTING SYSTEM" section of the Original Official Statement are hereby updated and restated by the following:

FINANCIAL AND ACCOUNTING SYSTEM

Accounting records for the Transportation Trust Fund are maintained by the Comptroller of the Treasury of the State of Maryland (the "Comptroller") and all cash and investments of the Transportation Trust Fund are held by the State Treasurer (the "Treasurer"), except for revolving cash accounts. Accounting records for the Transportation Trust Fund for operational and management purposes are maintained by the Department. The Department's financial statements and notes thereto for the fiscal year ended June 30, 2021, the most recent fiscal year for which financial statements and notes are available, contained in the ACFR have been prepared in conformity with generally accepted accounting principles accepted in the United States and have been audited by the firm of CliftonLarsonAllen LLP, independent certified public accountants.

The Government Finance Officers Association of the United States and Canada has awarded a Certificate of Achievement for Excellence in Financial Reporting to the Department for its annual comprehensive financial reports for each of fiscal years 2000 through 2020. The Department believes that its fiscal year 2021 annual comprehensive financial report continues to meet the requirements for this award but has not yet received notification regarding the fiscal year 2021 submission. In order to be awarded a Certificate of Achievement, a governmental unit must publish an annual comprehensive financial report, the contents of which conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements.

The "INSURANCE" section of the Original Official Statement is hereby updated and restated by the following:

INSURANCE

The operations of the MAA, the MPA and the MTA are covered by liability insurance policies and many suits are handled by the Department's insurance carriers.

The MAA's two facilities, BWI Marshall Airport and Martin State Airport, are covered by primary liability insurance policies totaling \$250,000,000 and an additional layer of excess liability totaling \$500,000,000. These policies cover liability for both bodily injury and property damage.

The MPA's liability insurance policies, including excess liability policies, provide insurance up to \$150,000,000 per occurrence for its port operations. These policies cover liability for both bodily injury and property damage.

The MTA's operations are covered by a \$495,000,000 excess liability insurance policy over and above the MTA's \$10,000,000 self-insured retention for local bus service (\$5,000,000 retention for Metro and Light Rail). Bombardier and Amtrak are contractors hired to provide MTA's commuter rail service known as MARC. In addition, MTA pays a track access fee to CSX for the use of CSX's railroad tracks (MARC Brunswick Line and Camden Line) and to Amtrak for use of Amtrak's railroad tracks (MARC Penn Line).

The MTA has insurance to cover its contractual obligations for the MARC rail service as well as insurance for MTA's other modes of service (Local Bus, Light RailLink, Metro SubwayLink and MobilityLink). The MARC operations insurance coverage provides excess liability up to \$500,000,000. Metro and Light Rail operations insurance coverage provides excess liability limits up to \$200,000,000 while Local Bus service has excess liability limits up to \$190,000,000. This includes a shared self-insured retention of \$5,000,000 for Metro SubwayLink and Light RailLink and \$10,000,000 for Local Bus service. Claims under \$10,000,000 for Local Bus (\$5,000,000 for Metro SubwayLink and Light RailLink) are self-insured by MTA. The excess liability policies also extend punitive damages liability coverage to Bombardier, Amtrak and CSX arising from commuter rail operations for claims. All third-party liability claims exceeding \$10,000 for Bombardier and \$25,000 for Amtrak must have prior approval of the MTA for payment/settlement. Workers Compensation claims by Bombardier, Amtrak or CSX are exempt from the MTA's coverage because those are the responsibility of the vendors. In fiscal year 2019, there was one settlement that exceeded the insurance coverage.

The Department takes the position that the purchase of liability insurance does not act as a waiver of the tort immunity defense in all cases. Under the Maryland Tort Claims Act (the "Tort Claims Act"), the immunity of the State and its units is waived as to any tort action, in a court of the State, up to an amount not to exceed \$200,000 per single claimant before September 30, 2015, and \$400,000 per single claimant on or after October 1, 2015, for injuries arising from a single incident or occurrence. In July 2022, a tort cap of \$890,000 was set for law enforcement. Immunity is not waived under the Tort Claims Act for punitive damages, interest before judgment, claims related to the State militia, any tortious act or omission by State personnel that is not within the scope of their public duties or is made with malice or gross negligence or claims otherwise prohibited by law. The waiver of tort immunity by the MTA is not governed by the Tort Claims Act, but by a separate statutory provision.

The "**EMPLOYEE RELATIONS**" section of the Original Official Statement is hereby updated and restated by the following:

EMPLOYEE RELATIONS

As of June 30, 2022, the Department had 9,057.5 authorized employee positions, not including the Authority.

Labor-Management Relations. As of June 30, 2022, the State had approximately 107,319 employees. States are exempt from the provisions of the National Labor Relations Act; thus, certain State employees may engage in collective bargaining only if specifically authorized. Since 1999, collective bargaining has been available to eligible State employees in executive branch agencies. Currently there are approximately 30,000 eligible State employees assigned to one of eleven bargaining units. These bargaining units are represented by seven certified exclusive bargaining representatives that are entitled to negotiate with the Governor or his designee(s) regarding wages, hours, and working conditions on behalf of bargaining unit employees. The negotiating parties execute a memorandum of understanding of not less than 1 year or more than 3 years' duration that incorporates all matters of agreement reached. Additionally, State employees may join employee associations, and the State permits the deduction of dues from employees' salaries for these associations.

As of July 1, 2022, of the 3,395 authorized employees of the MTA, 2,659 were represented by three separate unions. At the option of either party, any labor dispute involving the MTA and its unionized employees may be submitted to binding arbitration.

The current contract with the union (AFSCME Local 1859) representing 175 security personnel was ratified as of January 1, 2020 and will expire on December 31, 2023. The contract with the union (ATU Local 1300) representing 2,317 operations and maintenance employees and the contract with the union (OPEIU Local 2) representing 167 office employees both expired on June 30, 2022. MTA is continuing negotiations for new contracts with both unions.

Although the State permits non-management employees of the MTA to engage in collective bargaining, these employees are not authorized to engage in any type of strike, slow-down or work action. Since the creation of the Department in 1971, there have been no work stoppages.

The "**RETIREMENT PLANS**" section of the Original Official Statement is hereby updated and restated by the following:

RETIREMENT PLANS

As of June 30, 2022, 5,309 employees of the Department were members of the Maryland State Retirement and Pension System (the "System"). See "STATE GOVERNMENT — Maryland State Retirement and Pension System" for detailed information. An additional 2,503 active Department employees were members of the MTA pension plans, discussed herein.

The Department's contribution to the System for its employees is appropriated annually from the Transportation Trust Fund. The Department's contribution to the System was \$72,457,297 in fiscal year 2022 not including contributions to the Law Enforcement Officers' Pension System ("LEOPS"). The Department's budget for fiscal year 2023 is \$79,764,817. The contribution is calculated using a percentage rate applied to the projected earnings of employees. The State's Department of Budget and Management informs the Department of the percentage rate to be used in each budget year. (For additional information about the System, see the ACFR, Note 14.)

The Governmental Accounting Standards Board ("GASB") issued Statement No. 68, Accounting and Financing Reporting for Pensions, ("GASB 68") effective for fiscal years beginning after June 30, 2014. As part of GASB 68, the Department is required to record its share of the State's net unfunded pension liability (the "NPL"). The Department's share of the NPL is calculated by dividing the Department's contribution to the System by the total contributions to the System multiplied by the System's NPL. The Department's fiscal year 2021 allocation of the NPL was \$705,942,000.

The MTA provides pension benefits to its employees for three union it recognizes and for former union members promoted to management positions (the "MTA Plan"). All other management employees hired after April 30, 1970 are members of the State Employees' Retirement or Pension Systems. All three active union contracts include a provision requiring union employees to contribute a percentage of their gross pay to the MTA Plan. (see "*Labor-Management Relations*"). Effective July 1, 2021, the ATU Local 1300 employee contribution rate is 4%, OPEIU Local 2 contributions is 4% and AFSCME Local 1859 is 4%.

The MTA Plan provides retirement, death and disability benefits and is funded in compliance with collective bargaining agreements. Employees hired after July 1, 2016 are vested after 10 years of service. For all employees hired before July 1, 2016, vesting varies based on the applicable bargaining agreement. Employee retirement benefits are based on years of service times an annual benefit multiplier of 1.7% of final average compensation. Generally, full-service retirement benefits are based on 30 years of service and age 52 or attainment of age 65 with 5 years of service.

The annual contribution to the MTA Plan is based upon a report of the consulting actuary. The Department's contribution provided approximately \$75,439,000, which includes employee contributions of approximately \$6,833,000 and a supplemental payment of approximately \$15,000,000 to the MTA Plan in fiscal year 2022. The Department's MTA fiscal year 2023 budget provides approximately \$60,200,000 (which includes employee contributions of approximately \$6,600,000) for the MTA Plan. The MTA's actuary calculated the MTA's fiscal year 2021 NPL to be \$1,130,235,012.

As of December 31, 2021, membership in the MTA Plan included 2,545 active members, 525 vested former members, and 2,038 retirees (including qualified domestic relations order participants) and beneficiaries. The total pension liability is based upon the July 1, 2021 valuation data and assumptions determined by the consulting actuary and rolled forward to June 30, 2022.

Funded Status of the MTA Plan As of July 1, 2021 (\$ in thousands)

Actuarial	Actuarial		Unfunded	Covered	UAAL As
Accrued	Value of	Funded Ratio	AAL	Payroll	a Percent
Liability (AAL)	<u>Assets</u>	(Assets/Liab.)	(UAAL)	(Active Members)	<u>of Payroll</u>
\$844,099	\$418,742	49.61%	\$425,358	\$164,553	258.5%

For more detail on the MTA Plan, see:

https://mdot.maryland.gov/OOF/2021 FINAL Pension 201778 MTA.pdf

Certain law enforcement officers at MTA, as well as MAA and MVA, are members of LEOPS. MTA police officers have been covered under LEOPS since July 1, 2005. The Department's contribution to MTA LEOPS in fiscal year 2022 was \$3,787,846 and the budget for fiscal year 2023 is \$6,919,114. For MAA LEOPS, the contribution in fiscal year 2022 was \$2,527,557 and the budget for fiscal year 2023 is\$2,707,621. For MVA LEOPS, the contribution in fiscal year 2022 was \$183,715 and the fiscal year 2023 budget is \$193,378. Altogether, the Department's contribution to LEOPS in fiscal year 2022 was \$6,499,118 and the budget for fiscal year 2023 is \$9,820,113.

In addition, some airport firefighters are members of Baltimore City's Fire and Police Retirement System. The Department's contribution to this plan in fiscal year 2022 was \$821,755 and the budget for fiscal year 2023 is \$948,843.

The "**OTHER POST-EMPLOYMENT BENEFITS**" section of the Original Official Statement is hereby updated and restated by the following:

OTHER POST-EMPLOYMENT BENEFITS

Eligible retired Department employees and their eligible dependents may participate, on a subsidized basis, in the State Employee Retiree Health and Welfare Benefits Program of Maryland (the "Program") which funds retirees' health care costs on a pay as you go basis. See "STATE GOVERNMENT — Other Post-Employment Benefits" for a detailed discussion.

The MTA provides a retiree health care benefits plan (the "MTA OPEB") to all employees who are members of the MTA Plan, except for transfers from union to management positions who are required to enroll in the Program. See "STATE GOVERNMENT — Other Post-Employment Benefits". The annual funding of the MTA OPEB is based upon a report of the consulting actuary. The MTA OPEB is an unfunded pay-as-you-go plan. The MTA does not currently have a separate fund set aside to pay healthcare costs.

Maryland Transit Administration Pension Plan OPEB Annual OPEB Cost and Net OPEB Obligation Fiscal Year 2021 (\$ in millions)

Balance as of June 30, 2019 for FY 2020		
Changes for the Year:		
Service Cost	46.1	
Interest	26.5	
Changes of Benefit Terms	0.0	
Experience Losses/(Gains)	19.7	
Trust Contribution – Employer	(20.4)	
Net Investment Income	0.0	
Changes in Assumptions	(21.7)	
Benefits Payments (net of retiree contributions)	0.0	
Administrative Expense	0.0	
Net Changes	50.3	
Balance as of June 30, 2020 for FY 2021	\$883.0	

Note: Numbers may not add due to rounding

For a more detailed discussion of MTA's OPEB, see the Department's ACFR, Note 15.

The "Maryland State Retirement and Pension System" and "Other Post-Employment Benefits" subsections of the "STATE GOVERNMENT" section of the Original Official Statement are hereby updated and restated by the following:

Maryland State Retirement and Pension System

Introduction. This section is intended to provide a summary of relevant information related to the Maryland State and Retirement and Pension System (the "System" or the "State Retirement System"). The following documents related to the System are available at https://sra.maryland.gov/investments-financials and are incorporated herein by reference:

- Maryland State Retirement and Pension System Actuarial Valuation Report, as of June 30, 2021
- Maryland State Retirement and Pension System Actuarial Valuation Report for Maryland Municipal Corporations, as of June 30, 2021
- Maryland State Retirement and Pension System Annual Comprehensive Financial Report for the years ended June 30, 2021 and 2020

Please note the actuarial information provided in this section has been provided to the System by the System's Actuary, Gabriel Roeder Smith & Company ("GRS"), which was retained by the Board of Trustees of the System pursuant to statute. As with all actuarial valuations and future projections, the actuarial valuations are based on actuarial assumptions that have been presented by the actuary and adopted by the Board of Trustees. One or more of these assumptions may prove to be inaccurate and may be changed in the future based on the future experience of the System.

Plan Description. The System was established in accordance with Division II of the State Personnel and Pensions Article of the Annotated Code of Maryland to provide retirement allowances and other benefits in a

defined benefit plan to State employees, teachers, police, judges, legislators and employees of participating governmental units. The System is administered by a 15-member Board of Trustees that has the authority to invest and reinvest the System's assets. The Board of Trustees is obligated to hold the assets of the System for the exclusive purposes of providing benefits to participants and for reasonable expenses of administration.

The Board of Trustees pays all benefits and expenses of the various plans in the System from the accumulation fund¹, annuity savings fund², and expense fund established for each plan. As additional security, if needed, the State is obligated to annually pay into the System at least an amount that, when combined with the System's accumulation funds, is sufficient to provide the allowances and other benefits payable under each plan during that fiscal year.

The System is made up of two cost-sharing employer pools: the "State Pool" and the "Municipal Pool." The "State Pool" consists of State agencies, boards of education, community colleges and libraries (the "State Pool"). The "Municipal Pool" consists of the participating governmental units that elect to join the System (the "Municipal Pool"). For actuarial valuation and funding purposes, neither pool shares in each other's actuarial liabilities. Municipal Pool participants cost-share in the liabilities of only the Municipal Pool, which receives a separate annual actuarial valuation in order to determine the funding levels and actuarial liabilities of the Municipal Pool. The Municipal Pool covers employees of over 163 political subdivisions and other entities within the State.

For actuarial valuation and funding purposes, the State Pool comprises five distinct systems: Teachers' Retirement and Pension Systems (the "Teachers' Combined Systems"), Employees' Retirement and Pension Systems (the "Employees' Combined Systems"), State Police Retirement System, Judges' Retirement System, and Law Enforcement Officers' Pension System. As of June 30, 2021, the State's membership in the System included 168,758 active members, 41,787 vested former members, and 149,541 retirees and beneficiaries. Together, the Teachers' Combined Systems and the Employees' Combined Systems account for 98% of membership in the State Pool.

Plan Benefits Pre- and Post-Reform. During the 2011 Legislative Session, pension reform legislation was proposed by the Governor and enacted by the General Assembly to ensure the long-term sustainability of the System's defined benefit structure and the affordability of the State's contribution in future years (the "2011 Pension Reforms").

¹The accumulation fund consists of employer contributions, interest on System assets, and retired members' previous contributions.

²The annuity savings fund consists of member contributions and statutory regular interest on members' accumulated contributions.

Following the 2011 Pension Reforms the normal service retirement benefits within the State Pool offered by the System are as follows:

PLAN TYPE	ANNUAL ALLOWANCE EQUALS	NORMAL SERVICE RETIREMENT ELIGIBILITY
Employees and Teacher	s Pension Systems	
Reformed	$AFC^1 \times .015 \times Years$ of Service	 Rule of 90²; or Age 65 with at least 10 years of eligibility service.
Alternate Contributory	(AFC × .012 × Years of Service to 6/30/98) + (AFC × .018 × Years of Service after 6/30/98)	 At least 30 years of eligibility service; or Age 62 with at least 5 years of eligibility service, age 63 with 4 years, age 64 with 3 years, age 65 or older with 2 years.
Contributory	(AFC × .012 × Years of Service to 6/30/98) + (AFC × .014 × Years of Service after 6/30/98)	 At least 30 years of eligibility service; or Age 62 with at least 5 years of eligibility service, age 63 with 4 years, age 64 with 3 years, age 65 or older with 2 years.
Non-Contributory	(AFC up to $SSIL^3 \times .008 \times Years$ of Service) + (AFC over the $SSIL \times .015 \times Years$ of Service after $6/30/98$)	 At least 30 years of eligibility service; or Age 62 with at least 5 years of eligibility service, age 63 with 4 years, age 64 with 3 years, age 65 or older with 2 years.
Non-Contributory Reformed	(AFC up to SSIL × .008 × Years of Service) + (AFC over the SSIL × .015 × Years of Service)	 Rule of 90; or Age 65 with at least 10 years of eligibility service.
Employees and Teacher	s Retirement Systems	
Non-Bifurcated		 At least 30 years of eligibility service; or At least age 60.
Plan C (Bifurcated Plan)	See Plan C (Bifurcated Plan) Worksheet	At least age 60, regardless of creditable service or at least 30 years of service regardless of age.
Law Enforcement Offic	ers' Pension System	
Non-Reformed	.02 × AFC × Years of Service up to 32.5 years	At least age 50; orAt least 25 years of eligibility service.
Reformed	.02 × AFC × Years of Service up to 30 years	At least age 50; orAt least 25 years of eligibility service.
Transfers from ERS	(.023 × AFC × Years of Service up to 30 years) + (.01 × AFC × Years of Service beyond 30 years)	 At least age 50; or At least 25 years of eligibility service.
State Police Retirement	System	
Non-Reformed	AFC \times .0255 \times Years of Service up to 28 years	 At least 22 years of eligibility service; or At least age 50.
Reformed	$AFC \times .0255 \times $ Years of Service up to 28 years	 At least 25 years of eligibility service; or At least age 50.
CORS	$1.818\% \times \text{years of service} \times \text{AFC}$	 Members joining on or before June 30, 2011: 3 highest years of salary and 5 years. All others: 5 highest years of salary and 10

PLAN TYPE	ANNUAL ALLOWANCE EQUALS	NORMAL SERVICE RETIREMENT ELIGIBILITY years. • Eligible after accruing 20 years of service regardless of age.			
Judges' Retirement System					
All	0.6666667 × Salary of Active Judge holding same level position held at termination (Prorated if years of service less than 16)	 Members joining on or before June 30, 2012: at least age 60 or retired by order of Court of Appeals. All others: at least age 60 and have accrued at least 5 years of eligibility service or l retired by order of Court of Appeals. 			
Legislative Pension Plan					
All	3.0% × current salary × years of service	 Members joining on or before June 30, 2012: age 60 and 8 years. All others: age 62 and 8 years. 			

¹AFC for purposes of the Employee and Teachers Pension Systems (Reformed benefit and Non-Contributory Reformed benefit only), the Law Enforcement Officers' Pension System (Reformed benefit only) and Correctional Officers' Retirement System (Reformed benefit only) means the five highest consecutive years of earnings divided by five. For all others, AFC means the three highest consecutive years of earnings divided by three.

In fiscal year 2021, State retirees and beneficiaries within the State Pool received benefit payments totaling \$3.9 billion, with an average benefit of \$26,352.

Assumptions. By law, employer contribution rates are established by annual actuarial valuations using the individual entry age normal cost method and actuarial assumptions adopted by the Board of Trustees. Assets are valued for funding purposes by recognizing investment gains and losses over a five-year period. Each year's investment gain or loss is amortized on a straight-line basis over five years. The final actuarial value of assets is limited to not more than 120% or less than 80% of the market value of assets.

At its July 2021 meeting, the System's Board of Trustees voted to reduce the assumed rate of return from 7.40% to 6.80% and to lower the general inflation assumption from 2.60% to 2.25%.

Based on the Actuary's actuarial experience study for fiscal years 2015 to 2018, the System's Board of Trustees adopted the following demographic assumptions:

- Retirement Age Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2019 valuation pursuant to the 2018 experience study for the period July 1, 2014 to June 30, 2018.
- Mortality Public Sector 2010 Mortality Tables for males and females with projected generational mortality improvements based on the MP-2018 fully generational mortality improvements scales for males and females.

Investments Allocations and Returns. The target asset allocation is set by the Board of Trustees, with no legal limits imposed by the General Assembly. The actual allocation takes into account that private market investments are made gradually in order to prudently reach the target level over multiple years. Amounts not yet invested in private markets are currently allocated to public equity and fixed income.

²Eligible for normal service retirement if years of service plus age equal 90.

³The Social Security Integration Level (SSIL) for the year of retirement or separation from employment. The SSIL for 2020 is \$133,770.

Asset Allocation

	Actual Allocation as of March 31, 2022	Long-Term Target Allocation
Public Equity	31.3%	34.0%
Private Equity	19. 9	16.0
Rate Sensitive	17.5	21.0
Real Assets	13.2	15.0
Credit/Debt Strategies	8.3	8.0
Absolute Return	7.6	6.0
Multi Asset	1.0	0.0
Cash	1.2	<u>0.0</u>
Total*	100.0%	<u>100.0%</u>

^{*}Totals may not add due to rounding.

The historical rates of return on the System's investments are (as of March 31, 2022, unaudited):

	1 year	3 year	5 year	<u>10 year</u>	<u>20 year</u>	<u>25 year</u>
Annualized Returns (gross of fees)	10.10%	11.77%	10.11%	8.49%	6.98%	6.89%

The System's rate of return, net of fees, on its investment portfolio was 2.81% (unaudited) for the fiscal year-to-date as of March 31, 2022.

Funding Policies. Effective on July 1, 2015, the State eliminated the corridor funding method for the Teachers' Combined Systems and Employees' Combined Systems beginning with fiscal year 2017. All future contributions will be based upon the Actuarially Determined Employer Contribution ("ADEC").

Employer Contribution. In fiscal year 2021, the State paid the full ADEC and contributed a total of \$2.0 billion. Beginning in fiscal year 2017, the local school boards now pay 100% of the local teachers' normal cost of local teachers' retirement as determined by the most recent valuation of the System. County governments were required to increase education funding by the additional pension costs during the phase in period.

The Department of Budget and Management estimates that the General Fund portion of the employer contribution represents 6.7% of the fiscal year 2022 General Fund budget. This percentage is anticipated to decrease 5.3% in fiscal year 2023, rise slightly to 5.4% in fiscal year 2024 and then decrease incrementally to 3.6% by fiscal year 2027. The following table presents estimates of the employer contribution relative to the General Fund budget in the next five fiscal years.

Funded Status and Asset Value. As reported in the System's annual Actuarial Valuation Report, the funded status of each plan in the "State Pool" as of June 30, 2021 was as follows:

Funded Status of the Plans within the "State Pool" Portion of the Maryland State Retirement and Pension System As of June 30, 2021 (\$ in thousands)

<u>Plan</u>	Actuarial Accrued <u>Liability (AAL)</u>	Actuarial Value <u>of Assets</u>	Funded Ratio (Assets/Liab.)	Unfunded AAL (UAAL)	Covered Payroll (Active Members) ^(a)	UAAL as a Percent of Payroll %(a)
Teachers' Retirement and						
Pension System	\$47,635,355	\$38,215,959	80.23%	\$9,419,395	\$7,688,846	122.5%
Employees' Retirement and	d					
Pension System	23,113,512	15,868,373	68.65	7,245,138	3,425,932	211.5
State Police Retirement						
System	2,527,230	1,771,695	70.10	755,535	119,048	634.6
Judges' Retirement System	n 622,633	570,319	91.6	52,314	52,073	100.5
Law Enforcement Officers	,					
Pension System	1,299,476	<u>875,491</u>	<u>67.37</u>	<u>423,985</u>	125,116	338.9
Total of All Plans*	<u>\$75,198,206</u>	<u>\$57,301,839</u>	<u>76.20%</u>	\$17,896,367	<u>\$11,411,015</u>	<u>156.8%</u>

^{*}Totals may not add due to rounding.

The following table presents information regarding the unfunded actuarial accrued liability of the System, including both the State Pool and the Municipal Pool for the years 2012 to 2021 as of June 30 valuation dates, derived from a report by the System's Actuary.

Historical Funding Progress Maryland State Retirement and Pension System (a) Actuarial Value of Assets (\$ in thousands)

Valuation	Actuarial	Actuarial	, <u> </u>	Unfunded	Covered	UAAL as
Date	Accrued	Value Of	Funded Ratio	AAL	Payroll	a Percent
June 30	Liability (AAL)	<u>Assets</u>	(Assets/Liab.)	(UAAL)	(Active Members)	of Payroll %
2012	\$57,869,145	\$37,248,401	64.4%	\$20,620,745	\$10,336,537	199.5%
2013	60,060,091	39,350,970	65.5	20,709,122	10,477,544	197.6
2014	62,610,193	42,996,957	68.7	19,613,237	10,803,632	181.5
2015	66,281,781	46,170,624	69.7	20,111,157	11,063,961	181.7
2016	67,781,924	47,803,679	70.5	19,978,245	11,155,924	179.1
2017	69,986,576	50,250,465	71.8	19,736,110	11,418,973	172.8
2018	72,574,689	52,586,528	72.5	19,988,161	11,566,220	172.8
2019	74,526,000	54,361,969	72.9	20,164,031	11,905,403	169.4
2020	76,471,035	56,246,776	73.6	20,224,259	12,501,422	161.8
2021	81,738,557	62,817,938	76.8	18,920,619	12,749,247	148.4

⁽a) Includes both the State Pool and the Municipal Pool accrued liabilities.

⁽a) The Covered Payroll and UAAL as a Percentage of Payroll results reported in the System's Actuarial Valuation Report were calculated using actual payroll data and differ slightly from the calculations shown in the State's Financial Statements which were calculated using projected payroll rather than actual payroll data.

The following table shows the projected funded ratios of the State Pool through projected full funding and reflects all legislative action and supplemental payments to date.

Projected Funded Ratios of State Pool (as of December 31)

Valuation	Based on June 30, 2021
<u>Year</u>	Valuation
2023	81.6%
2025	87.1
2027	88.9
2030	91.4
2031	92.2
2037	98.1
2039	100.2
2040	100.3

The following table presents information regarding the Asset Market Values of the System, including both the State Pool and the Municipal Pool, for the years 2012 to 2021 as of June 30 valuation dates, derived from a report by the System's Actuary.

Historical Market Value of Assets Maryland State Retirement and Pension System (a) (\$ in thousands)

Valuation		Valuation	
Date,	Market Value	Date,	Market Value
June 30	of Assets	<u>June 30</u>	of Assets
2012	\$37,178,726	2017	\$48,987,183
2013	40,363,217	2018	51,827,233
2014	45,363,217	2019	53,943,420
2015	45,789,840	2020	54,586,037
2016	45,365,926	2021	67,604,500

⁽a) Includes both the State Pool and the Municipal Pool.

As of March 31, 2022, the System's market value of assets (unaudited) was \$73.9 billion.

Accounting and Reporting. Beginning in fiscal year 2015, Statement No. 68 of the Governmental Accounting Standards Board required changes to the State's pension accounting and reporting. The net pension liability ("NPL") defined by the pronouncement, similar to the unfunded actuarial accrued liability, is reported as a liability on the government-wide statement of net position. It is a present value measure of benefits to be provided based on the employees' past service, and accordingly, recognizes the entire net pension expense, regardless of when this expense will be funded. It replaced the Net Pension Obligation ("NPO") previously reported as a liability. The NPO was the cumulative difference between required contributions to the pension plans to meet obligations as they came due and actual contributions, and therefore, measured the funding obligation only.

For the State Retirement and Pension System, a cost-sharing multiple-employer system, all cost-sharing employers are required to recognize a liability for their proportionate share of the NPL. In Maryland, the State funds the unfunded actuarial accrued liability applicable to local teachers' service, and therefore, the State records the NPL for the teachers' plan as a non-employer contributing entity.

For fiscal year 2021, the State's contribution to the System was \$2.0 billion, and the total contribution to the System was \$2.2 billion. The NPL for the System was calculated as \$15.0 billion as of June 30, 2021 of which the State's share has been estimated to be \$14.4 billion.

For a more detailed discussion of the System, see APPENDIX A, Note 15 to the Financial Statements and Required Supplementary Information. A copy of the System's Actuarial Valuation Report as of June 30, 2021 may be obtained online at https://sra.maryland.gov/actuarial-valuation-reports.

Other Post-Employment Benefits

State Employee and Retiree Health and Welfare Benefits Program. Retired State employees and their eligible dependents meeting certain qualifications may participate, on a subsidized basis, in the State Employee and Retiree Health and Welfare Benefits Program (the "Program"). As of July 1, 2021, the Program membership included 79,673 active employees, 2,467 vested former employees and 53,297 retirees and beneficiaries. The Program assesses a charge to retirees for post-employment health care benefits that is based on health care insurance charges for active employees. For the fiscal year ending June 30, 2021, retiree program members contributed \$101.0 million and the State contributed \$601.5 million for retiree health care benefits.

The State has adopted the GASB Statement No. 75 ("GASB 75") which supersedes GASB 45 and addresses how state and local governments should account for and report costs and obligations related to post-employment health care and other post-employment non-pension benefits ("OPEB") effective for fiscal year ending June 30, 2018. GASB 75 generally requires that the annual cost of OPEB and the related obligations and commitments be accounted for and reported in essentially the same manner as pensions under GASB 68. Annual OPEB costs typically will be based on actuarially determined amounts that, if paid on an ongoing basis, would provide sufficient resources to pay benefits as they come due.

The provisions of GASB 75 do not prescribe methods for funding OPEB plans, nor do they require governments to fund their OPEB plans. GASB 75 does, however, establish additional disclosure requirements for employers contributing to OPEB plans. For defined benefit OPEB, GASB 75 identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Disclosure and required supplementary information requirements about defined benefit OPEB also are required regardless of whether or not the plan is administered through a qualifying trust.

Under GASB 75, the Net OPEB Liability is reported as a liability on the State's financial statements. The Net OPEB Liability is the difference between the Total OPEB Liability (the actuarial present value of all future projected benefit payments attributable to service prior to the measurement date) and the Fiduciary Net Position (market value of assets).

The State's annual OPEB expense is calculated as change in Net OPEB Liability over the measurement period, with deferred recognition of certain aspects of the change in liability, including investment gains/losses, demographic gains/losses, and changes in actuarial assumptions. Unrecognized amounts are reported as deferred inflows and/or deferred outflows of resources related to OPEB until they are recognized in the annual OPEB expense.

2011 Employee and Retiree Health Benefits Reforms. The 2012 Budget implemented changes to employee and retiree prescription drug and health benefits (the "2011 Health Benefit Reforms") that decreased the State's projection of OPEB liability from \$15.9 billion prior to the 2011 Health Benefit Reforms to \$9.2 billion after the 2011 Health Benefit Reforms and decreased the corresponding State projection of ADEC under GASB 45 from \$1.22 billion to \$704.4 million. The 2011 Health Benefit Reforms increased employee and retiree prescription drug copayments and increased retiree premium payments and out of pocket maximums. For new employees hired after June 30, 2011, 10 years of service rather than 5 years is required for eligibility for retiree health benefits, and 25 years of service rather than 16 years is required in order to receive a full State subsidy. Under current law, effective January 1, 2019, State prescription drug benefits would have been discontinued for certain retirees and those retirees would have been required to enroll in Medicare Part D after the Part D coverage gap is phased out. However, following litigation brought by State retirees, an injunction has been issued forbidding the discontinuation of the prescription drug benefits for those retirees until the litigation is resolved. In addition, the General Assembly passed legislation that would create three state-funded

programs to limit costs related to the prescription drug benefit for certain eligible retirees. The Department of Budget and Management projects this legislation will increase the State's net OPEB liability by at least \$2.36 billion over 30 years.

OPEB Projections. As of June 30, 2021, the actuary's Total OPEB Liability was \$16.8 billion, and the Fiduciary Net Position was \$355.1 million, resulting in a Net OPEB Liability ("NOL") of \$16.4 billion. The discount rate used was an unblended pay-go rate of 2.21%. The ratio of the Fiduciary Net Position to the Total OPEB Liability was 2.12%. The covered payroll (annual payroll of active employees covered under the Program) was \$5.7 billion, and the ratio of the NOL to the covered payroll was 289.69%.

The following table from the Actuarial Valuation Reports as of June 30, 2021, prepared by the State's actuary, shows the components of the State's annual OPEB expense, the contribution to the Program and the State's Net OPEB Liability for fiscal year 2022.

State Employee and Retiree Health and Welfare Benefits Program Annual OPEB Expense and Net OPEB Liability Fiscal Year 2021-2022 Projections as of December 31, 2021 (\$ in millions)

Reporting Date under GASB 75	June 30, 2021	June 30, 2022
Measurement Date under GASB 75	June 30, 2020	June 30, 2021
Net OPEB Liability	\$16,424.5	\$14,798.6
Deferred inflows of resources related to OPEB	1,253.9	3,020.1
Deferred outflows of resources related to OPEB	(2,303.4)	(2,324.7)
Net Liabilities Relating to OPEB	\$15,375.0	\$15,494.0
Net OPEB Expense	\$1,064.1	\$748.7
Less: Contributions made	(601.5)	(629.6)
Net Change in Liabilities Relating to OPEB	\$462.6	\$119.1

The State's General Fund has historically contributed approximately 60% of the annual pay-as-you-go costs of other post-employment benefits, with special and federal funds contributing the balance. Chapter 355 of the 2007 Laws of Maryland created the Postretirement Health Benefits Trust Fund (the "Trust Fund") as an irrevocable trust. Funds of the Trust Fund will be used to assist in financing the State's post-retirement health insurance subsidy. The net assets held in trust for post-retirement health benefits as of June 30, 2021 were \$355.1 million. This balance also reflects the activity for investment earnings and administrative expenses during the period.

The "MUNICIPAL ADVISORS" section of the Original Official Statement is hereby updated and restated by the following:

MUNICIPAL ADVISORS

PFM Financial Advisors LLC of Orlando, Florida ("PFM") is serving as municipal advisor to the Department for the sale and delivery of the 2021 A Bonds and other matters pertinent thereto. PFM is a municipal advisory and consulting organization and is not engaged in the business of underwriting, marketing, or trading municipal securities or any other negotiable instrument. PFM contracted with People First Financial Advisors as an additional Municipal Advisor to assist in the sale and delivery of the 2021 A Bonds.

Davenport & Company LLC of Towson, Maryland ("Davenport") is a registered municipal advisor with the Municipal Securities Rulemaking Board and serves as finance advisor in connection with the issuance of the 2021 B Bonds, the 2022 A Bonds and the 2022 B Bonds and other matters related to the Department's finances.

PFM and Davenport have not been engaged, nor have they undertaken, to audit, authenticate or otherwise verify the information set forth in this Official Statement, or any other related information available to the Department, with respect to accuracy and completeness of disclosure of such information. PFM and Davenport make no guaranty, warranty or other representation respecting the accuracy or completeness of this Official Statement or any other matter related to the Official Statement.

The "**REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS**" section of the Original Official Statement is hereby updated and restated by the following:

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

The ACFR for the year ended June 30, 2021, referenced in Appendix A of this Official Statement, has been audited by CliftonLarsonAllen LLP, independent certified public accountants, whose report is included therein.

The first two paragraphs under the "TAX MATTERS – Federal Tax Matters" section of the Original Official Statement are hereby updated and restated as follows:

Federal Tax Matters

General Matters. In the opinion of Kutak Rock LLP, Bond Counsel, under existing laws, regulations, rulings and judicial decisions, interest on the Bonds (including original issue discount treated as interest, if any) is excludable from gross income for federal income tax purposes. In addition, interest on the Bonds is not a specific preference item for purposes of the federal alternative minimum tax imposed on individuals. The opinions described in the preceding sentences assume the accuracy of certain representations and compliance by the Department with covenants designed to satisfy the requirements of the Internal Revenue Code of 1986, as amended (the "Code") that must be met subsequent to the issuance of the Bonds. Failure to comply with such requirements could cause interest on the Bonds to be included in gross income for federal income tax purposes retroactive to the date of issuance of the Bonds. The Department has covenanted to comply with such requirements. Bond Counsel has expressed no opinion regarding other federal tax consequences arising with respect to the Bonds. For tax years beginning after December 31, 2022, interest on the Bonds may affect the federal alternative minimum tax imposed on certain corporations.

The accrual or receipt of interest on the Bonds may otherwise affect the federal income tax liability of the owners of the Bonds. The extent of these other tax consequences will depend upon such owner's particular tax status and other items of income or deduction. Bond Counsel has expressed no opinion regarding any such consequences. Purchasers of the Bonds, particularly purchasers that are corporations (including S corporations, foreign corporations operating branches in the United States and certain corporations subject to the alternative minimum tax imposed on corporations for tax years beginning after December 31, 2022), property or casualty insurance companies, banks, thrifts or other financial institutions, certain recipients of social security or railroad retirement benefits, taxpayers otherwise entitled to claim the earned income credit, or taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations, should consult their tax advisors as to the tax consequences of purchasing or owning the Bonds.

The third paragraph under the "CONTINUING DISCLOSURE" section of the Original Official Statement is hereby updated and restated as follows:

The Department believes it has complied in all material respects with its obligations under its previous continuing disclosure undertakings pursuant to Rule 15c2-12 during the last five years. The Department acknowledges that a notice of refunding of certain Consolidated Transportation Bonds, Series 2014 Bonds was not timely filed with EMMA within 10 business days after the refunding transaction on March 3, 2022, due to the acknowledged oversight by the escrow agent for the refunding. The required filing was made with EMMA on June 10, 2022, and the Department has put in place procedures to ensure that such future event filings will be made on a timely basis.

APPENDIX A – "FINANCIAL INFORMATION" AND APPENDIX B - "STATE DEMOGRAPHIC AND ECONOMIC DATA" of the Original Official Statement is hereby updated and restated by the following appendices. The form of Bond Counsel opinion to be delivered for the 2022 B Bonds is hereby updated in the following APPENDIX C – FORM OF BOND COUNSEL OPINION FOR THE 2022 B BONDS.

FINANCIAL INFORMATION

The Annual Comprehensive Financial Report (the "ACFR") of the Department, including the audited Basic Financial Statements, for the fiscal year ended June 30, 2021, has been filed with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access ("EMMA") system and is obtainable from them in accordance with their procedures. The 2021 ACFR is also posted on the Department's website and can be accessed at https://www.mdot.maryland.gov/tso/pages/Index.aspx?PageId=53.

The following reports, each of which are included in the 2021 ACFR and as such have been posted online at the web address above, are incorporated herein by reference:

Financial Section

Independent Auditors' Report

Management's Discussion and Analysis

Statement of Net Position

Statement of Activities

Balance Sheet

Reconciliation of the Governmental Funds' Fund Balance to the Statement of Net Position

Statement of Revenues, Expenditures and Changes in Fund Balances

Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balances of Governmental Funds to the Statement of Activities

Statement of Fiduciary Net Position

Statement of Change in Fiduciary Net Position

Index for Notes to the Financial Statements

Notes to the Financial Statements

Required Supplementary Information

Schedule of Changes in the Total Liability and Related Ratios for the Maryland Transit Administration OPEB Plan

Changes in the Net Pension Liability and Related Ratios for the Maryland Transit Administration Pension Plan

Schedule of Employer Contributions for the Maryland Transit Administration Pension Plan

Proportionate Share of the Net Pension Liability and Related Ratios for the Maryland State Retirement Pension Plan

Schedule of Employer Contributions for the Maryland State Retirement Pension Plan

Schedule of Revenues, Expenditures and Changes in Fund Balances - Budget and Actual

Notes to the Required Supplementary Information

STATE DEMOGRAPHIC AND ECONOMIC DATA

Introduction

The following selected socioeconomic data may be relevant in evaluating the economic and financial condition of the State; however, this information is not intended to provide all relevant data necessary for a complete evaluation of the State's economic and financial condition.

Maryland is located on the East Coast in the South Atlantic Census Region, and is bordered by Delaware, Pennsylvania, West Virginia, Virginia, and the District of Columbia. Maryland encompasses 12,407 square miles. Ranking 42 among the 50 states in size, Maryland's land area (exclusive of inland waterways and the 1,726 square miles of the Chesapeake Bay) is 9,844 square miles.

Population

According to the 2020 Census, Maryland's population on April 1 of that year was 6,177,224, an increase of 7.0% from 2010. Maryland's population is concentrated in urban areas. In 2020, the eleven counties and Baltimore City located in the Baltimore-Washington region contained 87.3% of its population. The 2020 population for the Baltimore Metropolitan Statistical Areas was estimated at 2,800,189 and for the Maryland portion of the Washington Metropolitan Statistical Areas, 2,484,097. Overall, Maryland's population per square mile was 615 in 2020. The following table presents estimated population of Maryland and the United States from 2012 - 2021.

Population

	Maryland		<u>United St</u>	ates_
<u>Year</u>	Population	Change	Population	Change
2012	5,888,375	0.8%	313,877,662	0.7%
2013	5,925,197	0.6	316,059,947	0.7
2014	5,960,064	0.6	318,386,329	0.7
2015	5,988,528	0.5	320,738,994	0.7
2016	6,007,014	0.3	323,071,755	0.7
2017	6,028,186	0.4	325,122,128	0.6
2018	6,042,153	0.2	326,838,199	0.5
2019	6,054,954	0.2	328,329,953	0.5
2020	6,172,679	1.9	331,501,080	1.0
2021	6,165,129	(0.1)	331,893,745	0.1

Source: U.S. Department of Commerce, Bureau of the Census.

Note: Figures are estimates for July 1 of each year.

In addition to population growth, the age distribution of the population has a significant impact on the economy and State revenues. Realized and expected changes to the age distribution of the population will result in subdued productivity and labor force growth compared to economic expansions of the recent past. Primarily this is due to the fact that the age distribution of the labor force is skewed more towards younger and older workers than in the past, and middle-aged workers are the most productive and have the highest earning on average. In March 2018, the Bureau of Revenue Estimates released a report titled The Impact of Age Demographics on Maryland's Economic and Tax Revenue Outlook. This report may be obtained online at the following link: http://treasurer.state.md.us/media/1111/BRE Report On Age Demographics.pdf. For 2020, the most recent year for which data is available, the populations of Maryland and the United States were distributed by age as follows:

Age Distribution 2020

Age	Maryland	United States
Under 5 years	5.9%	5.8%
5 through 19 years	18.6	18.7
20 to 44 years	32.8	33.1
45 to 64 years	26.4	25.0
65 years and over	<u>16.3</u>	<u>16.8</u>
-	100.0%*	100.0%*

Source: U.S. Department of Commerce, Bureau of the Census.

Educational Levels

Maryland's workforce is more highly educated than the United States as a whole. As of 2019, the most recent year for which data are available, the percentage of the population (25 years and over) with a bachelor's degree or higher is 40.9% compared to 33.1% for the nation as a whole. Maryland ranks third in the nation in the percentage of its population over 25 with a graduate or professional degree. The percentage of the population with a high school diploma or higher is 90.4% in Maryland compared to 88.6% for the nation as a whole. Maryland's high levels of educational attainment partially explain higher median and average wages in Maryland compared to the nation as a whole. The State's educated labor force facilitates the growth of the professional services and information services sectors.

Educational Attainment of Population 25 Years and Over in 2019

	<u>Maryland</u>	United States
Less than High School	9.6%	11.4%
High School Diploma	24.6	26.9
Some College	18.0	20.0
Associate's Degree	6.9	8.6
Bachelor's Degree	21.8	20.3
Graduate or Professional Degree	19.1	12.8

Source: U.S. Department of Commerce, Census Bureau (American Community Survey).

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^{*} Totals may not add due to rounding.

Personal Income

Maryland residents received approximately \$404.5 billion in personal income in 2020. Maryland's total personal income increased at a rate of 6.1%, compared to the national average of 6.6%. Per capita income remained significantly above the national average in 2020: \$66,799 in Maryland compared to the national average of \$59,510. In 2020, Maryland's per capita personal income ranked eighth highest in the nation. Per capita income varies across the State, with the highest incomes in the Washington and Baltimore regions. The table below shows trends in per capita personal income in Maryland and the United States.

Per Capita Personal Income Trends

<u>Year</u>	Maryland	Change	United States	Change	Maryland Ranking
2011	\$51,970	4.6%	\$42,783	5.1%	5
2012	53,016	2.0	44,614	4.3	8
2013	52,576	-0.8	44,894	0.6	8
2014	54,100	2.9	47,017	4.7	8
2015	56,392	4.2	48,891	4.0	7
2016	58,329	3.4	49,812	1.9	5
2017	60,014	2.9	51,811	4.0	5
2018	61,600	2.6	54,098	4.4	6
2019	62,989	2.3	56,047	3.6	8
2020	66,799	6.0	59,510	6.2	8

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Note: Rankings do not include the District of Columbia.

As one of the wealthier states, a greater share of personal income is derived from dividends, interest and rent, and a lesser share comes from transfer payments. In 2020, the sources of personal income in the State and the comparable sources of personal income for the nation were as follows:

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Sources of Personal Income 2020 (\$ in millions)

Percentage of Personal Income Before Residence Adjustment Maryland Maryland **United States** 0.1% 0.9% Mining, forestry, fishing 257 18,151 4.8 4.2 Construction..... Manufacturing..... 11,868 3.1 6.0 Trade, transportation & utilities..... 32,014 8.5 10.2 1.5 2.5 Information services 5,852 Finance, insurance & real estate 23,333 6.2 6.7 Professional & business services 53,265 14.1 12.1 Educational & health services..... 35,019 9.3 8.7 Leisure & hospitality services..... 8,600 2.3 2.5 Other services 9,165 2.4 2.3 7.7 1.9 Government 29,088 4,430 1.2 0.7 Federal, civilian 31,122 8.2 8.0 Military State & local 476 0.1 0.6 Farm income 262,639 69.5 67.3 67.3 Earnings by place of work 262,639 69.5 Less: Personal contributions for social insurance (29,360)-7.8 -7.4 Plus: Dividends, Interest and Rent..... 70,043 18.5 18.5 Transfer Payments 74,467 19.7 21.6 Personal income before residence adjustment 23,333 100.0%* 100.0%* 26,732 Residence adjustment 0.0 6.6 Total Personal Income \$404,521*

Source: U.S. Department of Commerce, Bureau of Economic Analysis (State Quarterly Personal Income, Series SQ5N).

Note: Total personal income is reported by place of residence; however, income by industry is shown by place of work. The residence adjustment accounts for Maryland residents who work outside the State.

Between 2015 and 2020, total personal income in Maryland has grown 3.5% annually, compared to a national growth rate of 4.0%. During this period, wage and salary income, roughly half of total personal income, has grown at a lower rate in Maryland than nationally. The difference in growth of the residence adjustment income earned by residents who work outside of Maryland or the nation is not very meaningful, because the residence adjustment is 6.3% of Maryland personal income, but less than one tenth a percent of national personal income.

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^{*} Totals may not add due to rounding.

Average Annual Growth of Personal Income Components (2015 through 2020)

	Maryland	United States
Wages and Salaries	3.1%	3.7%
Supplements to Wages and Salaries	2.3	2.9
Proprietors' Income	(0.3)	3.0
Contributions for Social Insurance	3.0	3.9
Residence Adjustment	3.6	1.7
Dividends, Interest, and Rent	2.2	3.3
Transfer Payments	9.8	9.6
Total Personal Income	3.7	4.6

Source: U.S. Department of Commerce, Bureau of Economic Analysis (State Annual Personal Income, Series A04). Note: Total personal income is reported by place of residence; however, income by industry is shown by place of work. The residence adjustment accounts for Maryland residents who work outside the State.

Within the past year, a significant contraction in economic output occurred due to the COVID-19 pandemic and efforts to contain it. However, a massive federal economic stimulus response (both monetary and fiscal) has kept aggregate income growing, boosting both savings and consumption. As a result, the state's revenues have so far been insulated from experiencing the shortfall that typically accompanies recessions.

Annual Personal Income and Wages and Salaries Growth

	Personal Income		Wages a	nd Salaries
	Maryland	United States	Maryland	United States
2011	5.5%	5.9%	3.6%	4.0%
2012	2.9	5.0	3.1	4.6
2013	(0.2)	1.3	0.9	2.7
2014	3.5	5.5	3.4	5.1
2015	4.7	4.8	4.7	5.1
2016	3.8	2.6	3.1	3.0
2017	3.3	4.7	3.6	4.7
2018	2.9	5.0	3.5	4.9
2019	2.5	4.1	3.7	4.8
2020	6.1	6.6	1.7	1.2

Source: U.S. Bureau of Economic Analysis.

Employment

Maryland's labor force totaled 3.1 million in December 2021. The government, retail trade, and services sectors (notably professional and business, and educational and health) are the leading areas of employment in the State. In contrast to the nation, considerably more Marylanders are employed by the federal government and service sectors and fewer in manufacturing, as shown in the following table:

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Distribution of Employment 2020

	Maryland	United States
Construction & mining	6.3%	5.5%
Manufacturing	4.2	8.6
Trade, transportation & utilities	17.3	18.7
Information services	1.3	1.9
Financial activities	5.3	6.1
Professional & business services	17.1	14.2
Educational & health services	17.2	16.3
Leisure & hospitality services	8.2	9.4
Other services	3.9	3.8
Government		
Federal	5.8	2.1
State & local	<u>13.5</u>	<u>13.3</u>
Total	<u>100.0%*</u>	100.0%*

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Average Annual Employment Growth (2015 through 2020)

	Maryland	United States
Construction & mining	0.7%	1.7%
Manufacturing	0.4	(0.2)
Trade, transportation & utilities	(0.7)	(0.2)
Information services	(3.1)	(0.4)
Financial activities	(1.2)	1.4
Professional & business services	0.3	0.6
Educational & health services	0.1	1.1
Leisure & hospitality services	(4.6)	(2.5)
Other services	(2.0)	(0.8)
Government		
Federal	0.7	1.2
State & local	(0.6)	(0.3)
Total Non-agricultural Employment	(0.6)	0.1

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Historical annual employment growth in Maryland's five largest sectors is shown in the table below. Maryland's five largest sectors represented 79.0% of total employment in 2020. Typically, federal government employment acts as a stabilizing factor in Maryland, falling less than private employment during recession, and rising less than private employment during expansions. In mid-2019 federal employment returned to growth after about a year of gradual decline. As of the fourth quarter of 2020, federal government purchases of inputs from the private sector continued to increase year over year by 3.1%. In the spring of 2020, the nation experienced its worst job losses since the Great Depression. In April 2020, Maryland employment declined 13.0% year over year. Employment then sharply rebounded over the summer and fall. As of December 2021, employment remains 7.2% below its December 2021 level.

The employment recovery in Maryland has been largely bifurcated, with sectors directly affected by the pandemic, such as accommodations and food service, experiencing significant losses to date and other sectors experiencing more complete recoveries. In general, sectors worst impacted by the pandemic are lower paying than those that are not. As a result, aggregate wages (and therefore income tax withholding) have fallen less than would typically be expected given the extent of job losses.

^{*}Totals may not add due to rounding.

Annual Employment Growth Maryland's Five Largest Employment Sectors

	Total Government	Trade, Transportation, & Utilities	Educational & Health <u>Services</u>	Professional & Business <u>Services</u>	Leisure & Hospitality Services	Total MD Employment	Total US Employment
2011	0.5%	1.4%	1.9%	3.1%	1.6%	1.0%	1.2%
2012	(0.3)	1.3	2.4	2.8	4.7	1.2	1.7
2013	0.0	0.2	1.4	1.8	4.0	0.9	1.6
2014	(0.3)	1.0	1.2	1.5	2.5	0.9	1.9
2015	0.3	1.6	2.4	1.8	2.7	1.5	2.1
2016	0.0	1.1	2.0	1.8	2.1	1.2	1.8
2017	0.3	0.3	2.4	0.7	2.5	1.1	1.6
2018	0.4	0.5	2.1	1.9	0.7	0.9	1.6
2019	0.2	(0.3)	1.2	1.9	0.3	0.6	1.3
2020	(1.8)	(4.7)	(6.6)	(4.5)	(25.4)	(6.8)	(5.7)

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Recent employment trends in Maryland are shown in the following table.

Employment Trends

<u>Year</u>	Unemployment Rate in Maryland	Unemployment Rate in the United States	Growth in Maryland Labor Force	Growth in United States Labor Force
2011	7.3%	8.9%	0.6%	(0.2)%
2012	6.9	8.1	0.8	0.9
2013	6.5	7.4	0.3	0.3
2014	5.7	6.2	(0.1)	0.3
2015	5.0	5.3	0.5	0.8
2016	4.3	4.9	0.5	1.3
2017	4.1	4.4	1.5	0.7
2018	3.8	3.9	0.4	1.1
2019	3.5	3.7	1.7	0.9
2020	6.8	8.1	(3.0)	(1.7)

 $Source: Maryland\ Department\ of\ Labor,\ Licensing\ and\ Regulation.$ Note: In December 2020, the unemployment rate was 6.3% in Maryland and 6.7% in the United States.

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Assessed Value of Property

Maryland levies a State tax on real property, revenues from which are credited to the Annuity Bond Fund to pay debt service. Through fiscal year 2003 the rate was 8.4 cents per \$100 of assessment (21 cents on utility operating property). In fiscal year 2004 the rate was increased to 13.2 cents per \$100 of assessment (33 cents on utility operating property). For fiscal years 2007 through 2023 the tax rate has been 11.2 cents per \$100 of assessment (28 cents on utility operating property).

Shown below is the assessed value for State purposes of real property as determined by the State Department of Assessments and Taxation. All real property is assessed at full cash value once every three years, with any increase in full cash value phased in over the ensuing three taxable years in equal installments. Any decrease in the full cash value is recognized in full in the next taxable year and held constant for the remaining two taxable years.

Assessed Values of Real Estate (\$ in thousands)

		(+)		
Fiscal <u>Year</u>	Real <u>Property</u>	Utility Operating Real Property	<u>Total</u>	Change in Assessed <u>Values</u>
2012	682,650,240	793,154	683,443,394	(7.0)
2013	651,655,464	714,633	652,370,097	(4.5)
2014	642,571,751	737,924	643,309,675	(1.4)
2015	650,759,385	780,572	651,539,957	1.3
2016	669,345,818	786,889	670,132,707	2.9
2017	694,547,847	838,059	695,385,906	3.8
2018	719,269,719	889,156	720,158,875	3.6
2019	746,080,873	837,642	746,918,515	3.7
2020	770,161,164	864,974	771,026,138	3.2
2021	793,419,280	909,519	794,328,799	3.0
2022	817,300,614	986,733	818,287,347	3.0
2023	843,774,176	991,668	844,765,844	3.2

Source: State Department of Assessments and Taxation, March 31, 2022.

Note: See also, "STATE FINANCES - State Revenues, Property Taxes and State Property Tax Revenue Estimates."

Residential Real Estate

Residential real estate is particularly important in terms of State borrowing as State property tax revenue is dedicated to paying off principal and interest on general obligation bonds.

In 2020, the value of all Maryland residential unit permits issued increased by 2.7%, while the total number of residential building permits decreased by 2.8%. In 2021, the average monthly active inventory of units for sale decreased 37.9%. Unit sales for 2021 increased 10.5%, while the median unit price rose 9.4%. Recent federal tax changes are expected to decrease the portion of taxpayers who itemize deductions, which will result in fewer people receiving the home mortgage interest deduction. Given historically low interest rates however, any impact is expected to be minor.

Another relevant issue concerning real estate values, and thus property tax revenue, is climate change. Climate change is expected to result in higher sea levels, threatening coastal property. The State's Atlantic coastline is rather short relative to other East Coast states. Assateague Island, a protected barrier island, makes up the majority of Maryland's Atlantic coastline, leaving just over nine miles of developed coastline. However, as noted earlier, the State's boundaries encompass 1,726 square miles of the Chesapeake Bay (the "Bay"), the nation's largest estuary. The Bay coastline faces the twin problems of rising sea levels and subsiding land, owing to geological factors relating to the creation of the Bay and the composition of the soil. Contemporary flood risk and past instances of flooding would clearly reduce the relative value of a property. But economic theory holds that market participants are forward looking and price in their expectations of the future. Recent research confirms this tendency for properties that are expected to only be threatened by sea level rise several decades into the future. According to a

November 2019 paper in the Journal of Financial Economic, such homes already sell for an average discount of 6.6% compared to observably identical unexposed properties. The pricing in of future expectations means adjustment should be gradual rather than sudden. It is important to note that coastal properties are still more valuable than non-coastal properties on average and are expected to remain so because owners value the access to coastal amenities they provide.

Aggregate Value of and Building Permits Issued for Residential Construction in Maryland

Value of **Construction in Current Dollars** Number of (\$ in millions) **Permits Issued** Change Year Change 2011 \$2,204.6 12.9% \$13,481 13.0% 2,409.9 9.3 2012 15,217 12.9 2013 2.811.2 17.918 17.7 16.7 2014 2,889.2 16,331 2.8 (8.9)3,080.6 17,057 2015 6.6 4.4 17,044 2016 3.166.8 2.8 (0.1)16,224 2017 3,257.3 2.9 (4.8)2018 3,701.8 13.6 18,647 14.9 2019 3.754.0 1.4 18,469 (1.0)2020 3,853.5 2.7 17,982 (2.8)

Source: U.S. Department of Commerce, Bureau of the Census.

Home Sales and Median Home Price

	Unit		Median	
Year	Home Sales	Change	Home Price	Change
2012	54,148	5.6%	\$246,467	6.9%
2013	61,191	13.0	261,369	5.6
2014	62,804	2.6	262,837	1.0
2015	73,014	16.3	261,172	(0.7)
2016	80,045	9.6	270,902	3.8
2017	82,851	3.5	282,433	4.5
2018	83,598	0.9	288,282	2.1
2019	88,282	5.6	316,683	9.9
2020	103,362	17.1	338,387	6.9
2021	103,165	(0.2)	362,538	7.1

Source: Maryland Association of Realtors.

Taxable Retail Sales

In general, taxable retail sales in Maryland are sales of tangible goods and a few specific services, with notable exemptions for unprepared food and medicines, among others. The structure of the sales tax is increasingly out of step with consumption patterns. Consumption spending is shifting away from goods towards services, the vast majority of which are not taxable. Furthermore, consumers continue to transition to digital goods, which are not tangible and therefore not taxable, a process which has been accelerated by COVID-19. This means the sales tax base is becoming a smaller share of overall consumption spending. As a result, we collect less sales tax per dollar of consumption spending than in the past. The shrinking tax base also increases the volatility of sales tax revenue to the business cycle. In times of economic stress, consumers are typically better able to delay or forego consuming goods than services. The current recession, brought on by COVID-19, is different from previous recessions. In particular, historic trends have been reversed as consumers have shifted a greater share of total consumption away from services, generally not taxed, and towards goods, which generally are taxed.

Recent regulatory and legislative changes have broadened the sales tax base however, prior to such changes, in fiscal year 2015 Amazon established nexus with the State and began to collect sales tax on its direct sales. The Supreme Court decision, South Dakota v. Wayfair Inc., allowed states to require that remote sellers collect and remit sales tax to the locality in which the customer resides. The Comptroller promulgated regulations to require remote sellers to remit sales tax beginning in November 2018. Legislation from the 2019 session was passed that requires marketplace facilitators to collect and remit sales tax on behalf of sellers who use the online marketplace. Marketplace facilitators began to remit sales tax in November 2019. The Bureau expects combined revenue from remote sellers and marketplace facilitators to total around \$331 million in fiscal year 2020 and grow at a faster pace than overall sales tax thereafter. While these actions have broadened the scope of the sales tax, they will not contribute to ongoing growth in general fund revenue. Only the first \$100 million of revenue from remote sellers and marketplace facilitators is distributed to the State's general fund, the remainder is distributed to the Blueprint for Maryland's Future Fund.

The following table illustrates the change in taxable sales for fiscal years 2012 through 2021.

Taxable Retail Sales in Maryland (includes automobile sales)
(\$ in thousands)

Fiscal	Taxable	
Year	Retail Sales	Change
2012	\$76,758,835	3.1%
2013	78,254,027	1.9
2014	80,415,065	2.8
2015	84,825,062	5.5
2016	87,778,479	3.5
2017	89,627,253	2.1
2018	90,937,146	1.5
2019	94,489,166	3.9
2020	94,452,170	0.0
2021	103,153,242	9.2

Source: Comptroller of the Treasury, Bureau of Revenue Estimates. Note: Includes sales and use tax base and motor vehicle excise tax base.

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FORM OF BOND COUNSEL OPINION FOR SERIES 2022 B BONDS

[Applicable Settlement Date]

Secretary of Transportation of Maryland 7201 Corporate Center Drive P.O. Box 548 Hanover, MD 21076

\$143,585,000

Department of Transportation of Maryland Consolidated Transportation Bonds Refunding Series 2022 B (Forward Delivery)

Ladies and Gentlemen:

We have acted as Bond Counsel in connection with the issuance by the Department of Transportation of Maryland (the "Department"), an agency of the State of Maryland (the "State"), of \$143,585,000 Consolidated Transportation Bonds Refunding Series 2022 B (Forward Delivery) (the "Bonds"). The Bonds are being issued pursuant to the provisions of Sections 3-101 to 3-217, inclusive, of the Transportation Article of the Annotated Code of Maryland (2020 Replacement Volume, as amended and supplemented) (the "Act"), and Section 8-209 of the State Finance and Procurement Article of the Annotated Code of Maryland (2021 Replacement Volume, as amended and supplemented) ("Section 8-209"), a resolution of the Board of Public Works of Maryland adopted on August 11, 2021, and a resolution of the Secretary of Transportation of Maryland, dated as of September 15, 2021 (the "Resolution"). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution.

We have examined such law and the originals or certified copies of such resolutions, documents, records and other proofs as we deemed pertinent. As to questions of fact material to the opinions expressed herein, without undertaking to verify the same by independent investigation, we have relied upon the certified proceedings of the Board of Public Works of Maryland and the Department and other certifications by public officials. Our examination has been limited to the foregoing as they exist or are in effect as of the date hereof. Our opinion is limited to the matters expressly set forth herein, and we express no opinion concerning any other matters.

Based on the foregoing, we are of the opinion under existing law that:

- 1. The Act and Section 8-209 are valid enactments, and the Department is a validly created and existing agency of the State possessing authority under the Act and Section 8-209 to issue the Bonds.
 - 2. The Resolution has been duly adopted by the Department and is in full force and effect.
- 3. The Bonds have been duly authorized and validly issued for a valid public purpose in accordance with the Constitution of the State, the Act, Section 8-209 and the Resolution.
- 4. The Bonds are valid and legally binding obligations of the Department only, payable as to both principal and interest solely from the tax proceeds and other available revenues of the Department specified in the Act. The Bonds are not general obligations of the State, and the faith and credit of the State is not pledged to the payment of the principal of or interest on the Bonds.
- 5. Under existing laws, regulations, rulings and judicial decisions, interest on the Bonds is excludable from gross income for federal income tax purposes, and interest on the Bonds is not a specific preference item for purposes of the federal alternative minimum tax imposed on individuals. The opinion expressed in this paragraph 5 are subject to continuing compliance with certain covenants and the accuracy of certain representations of the Department pertaining to federal tax law in the Resolution and the Tax and Section 148 Certificate of the

Department of even date herewith. The noncompliance with such covenants or the inaccuracy of such representations could cause interest on the Bonds to be included in gross income for federal income tax purposes retroactive to the date of issue of the Bonds. For tax years beginning after December 31, 2022, interest on the Bonds may affect the federal alternative minimum tax imposed on certain corporations. Although we are of the opinion that interest on the Bonds is excludable from gross income for federal income tax purposes, the accrual or receipt of interest on the Bonds may otherwise affect the federal income tax liability of the recipient. The extent of these other tax consequences will depend upon the recipient's particular tax status or other items of income or deduction. We express no opinion regarding any such consequences.

6. Under existing law of the State, the Bonds, their transfer, the interest payable on them, and any income derived from them, including any profit realized in their sale or exchange, shall be exempt at all times from every kind and nature of taxation by the State or by any of its political subdivisions, municipal corporations, or public agencies of any kind, except that no opinion is expressed as to such exemption from Maryland franchise taxes or estate or inheritance taxes.

The opinions expressed herein as to the treatment of the interest borne by the Bonds for federal or State tax purposes is based upon statutes, regulations, rulings and court decisions in effect on the date hereof. Except as stated herein, we express no other opinion as to any federal tax consequences of the ownership of, receipt of, interest on, or disposition of the Bonds. We undertake no obligation to update the contents of this opinion on any future date. Each purchaser of the Bonds should consult his or her tax advisor regarding any changes in the status of any pending or proposed legislation.

In rendering our opinion, we advise you that:

- (a) The rights of the holders of the Bonds and the enforceability thereof and of the documents identified in this opinion may be subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights heretofore or hereafter enacted to the extent constitutionally applicable, and their enforcement may also be subject to the application of equitable principles and the exercise of judicial discretion in appropriate cases.
- (b) We express no opinion herein as to the accuracy, adequacy or completeness of any offering material relating to the Bonds.
- (c) Except as set forth above, we express no opinion regarding any other tax consequences relating to the ownership or disposition of the Bonds.
- (d) In rendering the opinions herein (excluding the opinion set forth in paragraph 5 for which the Attorney General expresses no opinion), we have relied, with permission, on the legal opinions of the Attorney General.

This opinion is addressed to, and is solely for the benefit of, the Board and may not be relied upon by any other person without our express written consent.

Very truly yours,